REVOLT ON THE TENTH WORLD by EDMOND HAMILTON

See Back Cover

AMAZING STORIES

NOVEMBER 20c

SCIENCE FICTION BY

BOND • GALLUN • KUMMER Jr.

WEST POINT 3000 A.D.

By MANLY WADE WELLMAN

"AND TO THINK . . .

I might have lost you!"

"I *DON'T KNOW how I could ever have been such a fool, Betsy . . . such a careless, unthinking idiot . . .*"

"Don't say that, darling. It was partly my fault, too. I should have told you . . . said something. But it's such an embarrassing subject to talk about—a person's breath! I didn't know how to tell you."

"It'll never happen again, dearest. I've learned my lesson—plenty. Thank heaven Bill saw the way things were going with us. And did he give me the devil about it, too! . . . Told me point-blank what the trouble was, and asked me how I expected any girl to stay in love with a man who constantly offended that way."*

Many Offend Without Realizing It

What else can ruin romance so quickly as halitosis* (bad breath)? And the worst of it is that if you yourself have this insidious condition you may not even know it . . . or even realize that you are offending.

In some cases halitosis is due to systemic conditions which call for treatment by your doctor. But usually . . . and fortunately . . . bad breath is due, say some authorities, to the fermentation of tiny food particles on tooth, gum, and mouth surfaces.

Sweetens the Breath

Listerine Antiseptic quickly halts such fermentation, and then overcomes the odors it causes. The breath becomes sweeter, fresher, more agreeable—less likely to offend.

If you are a heavy smoker you'll find Listerine Antiseptic almost invaluable. It does such a grand job of combating tobacco odors and ridding the mouth of that stale, musty taste caused by excessive smoking.

In any case, if you want people to like you . . . if you want to be at your best . . . make a habit of using Listerine Antiseptic before all important engagements. It may pay you real dividends in social and business success.

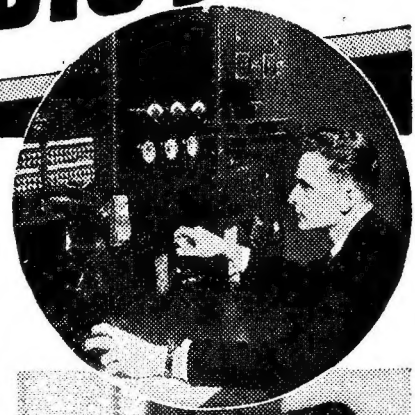
LAMBERT PHARMACAL COMPANY, *St. Louis, Mo.*

LISTERINE ANTISEPTIC . . . for a sweeter breath

I WILL SEND A SAMPLE LESSON FREE

to PROVE I can Train You at Home in Spare Time for

GOOD RADIO JOBS



BROADCASTING STATIONS (top illustration) employ Radio Technicians as operators, installation, maintenance men and in other fascinating, steady, well-paying technical jobs. **FIXING RADIO SETS** (lower illustration) pays many Radio Technicians $30, $40, $50 a week. Others hold their regular jobs, and make $5 to $10 extra a week in spare time.

I Trained These Men

Chief Operator Broadcasting Station

Before I completed your lessons, I obtained my Radio Broadcast Operator's license and immediately joined Station WMPC where I am Chief Operator. HOLLIS F. HAYES, 327 Madison St., Lapeer, Michigan.

Makes $50 to $60 a Week

I am making between $50 and $60 a week after all expenses are paid, and I am getting all the Radio work I can take care of, thanks to N. R. I. H. W. SPANGLER, 126½ S. Gay St., Knoxville, Tenn.

$10 to $25 a Week in Spare Time

I am now making from $10 to $25 a week in spare time while still holding my regular job as a machinist, I owe my success to N. R. I. WM. F. RUPP, 611 Green Street, Bridgeport, Pa

Get my sample lesson Free. Examine it, read it—see how clear it is, how easy to understand. Find out how I train you at home in spare time to be a Radio Technician. Do it now. Mail the coupon.

Many Radio Technicians Make $30, $40, $50 a Week

Radio Broadcasting stations employ engineers, operators, technicians. Radio manufacturers employ testers, inspectors, foremen, servicemen in good-pay jobs. Radio jobbers and dealers employ installation and servicemen. Many Radio Technicians open their own Radio sales and repair businesses and make $30, $40, $50 a week. Others hold their regular jobs and make $5 to $10 a week fixing Radios in spare time. Automobile, Police, Aviation, Commercial Radio; Loudspeaker systems, Electronic Devices are other fields offering opportunities for which N. R. I. gives the required knowledge of Radio. Television promises to open good jobs soon.

Many Make $5 to $10 a Week Extra In Spare Time While Learning

The day you enroll I start sending Extra Money Job Sheets; start showing you how to do Radio repair jobs. Throughout your Course, I send plans and directions that have helped many make $500 to $1,000 a year in spare time while learning. I send you special Radio equipment to conduct experiments and build circuits. This 50-50 method of training makes learning at home interesting, fascinating, practical. I ALSO GIVE YOU A MODERN PROFESSIONAL ALL-WAVE SET SERVICING INSTRUMENT to help you make more money fixing Radios while learning, and equip you for full time work after you become a Radio Technician.

Find Out What Radio, Television Offer You

Act Today. Mail the coupon now for sample lesson and 64-page book. They point out Radio's spare time and full time opportunities and those coming in Television; tell about my training in Radio and Television; show more than 100 letters from men I trained, telling what they are doing and earning. Find out what Radio, Television offer YOU! MAIL COUPON in an envelope, or paste on a postcard.

J. E. Smith, President
Dept. OKM, National Radio Institute
Washington, D. C.

Mail Coupon Now!

This FREE BOOK has Helped Hundreds of Men to Make More Money

Mr. J. E. Smith, President, Dept. OKM,
NATIONAL RADIO INSTITUTE, Washington, D. C.

Mail me FREE, without obligation, your Sample Lesson and 64-page book, "Rich Rewards in Radio." (No Salesman will call. Please write plainly.)

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City ..... State.....2FR

The Tested WAY to BETTER PAY

GET YOUR BODY OUT OF THE DUMPS

Stimulate Digestion Build Up Vitality

Feel down in the dumps? Lack your old PEP? Have frequent slight digestive upsets? Then—if there is nothing organically wrong with you—SLUGGISH DIGESTION may have you down. It can give you heartburn, gas, a dizzy head.

Don't resort to harsh laxatives or drugs for sluggish digestion. START those slow DIGESTIVE JUICES FLOWING FASTER. Set the millions of tiny cells of Fleischmann's live Yeast to work on these digestive-juice glands. This yeast is a STIMULATOR. It starts digestive juices flowing faster. In test cases digestion was greatly increased. Eat Fleischmann's Yeast regularly. Two cakes a day—one first thing in the morning, one a half hour before supper. See if you don't begin to FEEL LIKE A MILLION. Write today for "You Can't Feel Well If Digestive Juices Are Failing," F. Y. Co., Dept. P-O, 691 Washington St., New York. Absolutely FREE.

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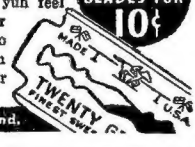
Sawtooth Harry Says: TWENTY GRAND RAZOR BLADES are Habit Forming

Brother . . . don't you Never try a Twenty Grand Razor Blade! They're HABIT FORMING. Once yuh feel the perfect leather-stropped edge again yer face, yer doomed. Yuh won't be able to get along without 'em. Keep away from them self-help displays in Drug and other stores in your neighborhood.

5 Leather Stropped BLADES FOR 10¢



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Complete with batteries and newest type reflector bulb. Ready for instant use. Strong, steady light. Useful everywhere. Order now.

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EVERY TIRE GUARANTEED

BALLOON TIRES

Size Rim	Tires	Tubes
29x4.40-21	$2.15	$1.05
29x4.50-20	2.35	1.05
30x4.50-21	2.40	1.15
28x4.75-19	2.45	1.25
29x4.75-20	2.50	1.25
29x5.00-19	2.85	1.25
30x5.00-20	2.85	1.25
6.25-17	2.90	1.35
28x5.25-18	2.90	1.35
29x5.25-19	2.95	1.35
30x5.25-20	2.95	1.35
31x5.25-21	3.25	1.35
6.50-17	3.35	1.40
28x5.50-18	3.35	1.40
29x5.50-19	3.35	1.40
6.00-17	3.40	1.40
30x6.00-18	3.40	1.40
31x6.00-19	3.40	1.45
32x6.00-20	3.45	1.55
33x6.00-21	3.65	1.55
32x6.50-20	3.75	1.75
6.00-16	3.75	1.45

REGULAR CORD TIRES

Size	Tires	Tubes	Size	Tires	Tubes
30x3½	$2.35	$0.95	33x4½	$3.45	$1.45
31x4	2.95	1.25	34x4½	3.45	1.45
32x4	2.95	1.25	30x5	3.65	1.65
33x4	2.95	1.25	33x5	3.75	1.75
34x4	3.25	1.35	36x5	3.95	1.75
32x4½	3.35	1.45	35x5	3.95	1.75

HEAVY DUTY TRUCK TIRES (High Pressure)

Size	Tires	Tubes	Size	Tires	Tubes
30x5	$4.25	$1.95	34x7	$10.95	$4.65
33x5	3.95	1.75	38x7	10.95	4.65
34x5	4.25	2.25	36x8	11.45	4.95
32x6	7.95	2.95	36x8	11.45	4.95
36x6	9.95	4.45	40x8	13.25	4.95

TRUCK BALLOON TIRES

Size	Tires	Tubes	Size	Tires	Tubes
6.00-20	$3.75	$1.65	7.50-20	$6.95	$3.75
6.50-20	4.45	1.95	8.25-20	8.95	4.95
7.00-20	5.95	2.95	9.00-20	10.95	5.65
			9.75-20	13.95	6.45

ALL OTHER SIZES — DEALERS WANTED

SEND ONLY $1.00 DEPOSIT on each tire ordered. ($3.00 on each Truck Tire.) We ship balance C. O. D. Deduct **5 per cent** if cash is sent in full with order. To fill order promptly we may substitute brands if necessary. ALL TUBES BRAND NEW—GUARANTEED—

PERRY-FIELD TIRE & RUBBER CO.

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FREE SAMPLES OF REMARKABLE TREATMENT FOR

Stomach Ulcers

Due to Gastric Hyperacidity

H. H. Bromley, of Shelburne, Vt., writes: "I suffered for years with acid-stomach trouble. My doctors told me I had acid stomach ulcers and would have to diet the rest of my life. Before taking your treatment I had lost a lot of weight and could eat nothing but soft foods and milk. After taking Von's Tablets, I felt perfectly well, ate almost anything and gained back the weight I had lost." If you suffer from indigestion, gastritis, heartburn, bloating or any other stomach trouble due to gastric hyperacidity, you, too, should try Von's for prompt relief. Send for FREE Samples of this remarkable treatment and details of trial offer with money back guarantee. Instructive Booklet is included. Write:

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Learn to MOUNT BIRDS

Tan SKINS, make up FURS

Be a Taxidermist. *Double your hunting fun.* We teach you **at Home.** Mount **Birds, Animals, Fish, Heads,** common specimens. **Fun and profits.** Decorate home and den **MAKE MONEY.** Mount game, tan for others. Big profits in spare time. **WRITE TODAY.**

100 game pictures in FREE BOOK Hunters, get your copy. It's **Now Free.** Send post card. State your **AGE.**

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60 Days' Trial! We make **FALSE TEETH** for *you* **by MAIL** from *your own* mouth-impression. **Money-Back Guarantee of Satisfaction.**

$6.85 to $35

FREE Free impression material, directions, catalog.

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ITCH STOPPED *in a Jiffy* -or Money Back

For quick relief from itching of eczema, pimples, athlete's foot, scales, scabies, rashes and other externally caused skin troubles, use world-famous, cooling, antiseptic, liquid D. D. D. Prescription. Greaseless, stainless. Soothes irritation and quickly stops the most intense itching. 35c trial bottle proves it, or money back. Ask your druggist today for **D. D. D. PRESCRIPTION.**

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My Store Route Plan PAYS BIG MONEY

Hundreds of men like you now make really big money week after week backed by our Money-Making "Store Route" Plan. Let us explain how your earning power should go UP when you take on our big-profit line of 5c—10c goods including many Nationally Advertised products. Show stores how to increase sales and profits up to 50%. Experience unnecessary. Write me TODAY.

H. B. LAYMON, President. Dept. 55-D. Spencer, Indiana

THE INSULT THAT MADE A MAN OUT OF "MAC"

HEY! QUIT KICKING THAT SAND IN OUR FACES!
LISTEN HERE, MAC. I'D SMASH YOUR FACE··· ONLY YOU'RE SO SKINNY YOU MIGHT DRY UP AND BLOW AWAY.
THE BIG BULLY! I'LL GET EVEN SOME DAY
OH DON'T LET IT BOTHER YOU, LITTLE BOY!
DARN IT! I'M SICK AND TIRED OF BEING A SCARECROW! CHARLES ATLAS SAYS HE CAN GIVE ME A REAL BODY. ALL RIGHT! I'LL GAMBLE A STAMP AND GET HIS FREE BOOK!
BOY! IT DIDN'T TAKE ATLAS LONG TO DO THIS FOR ME! LOOK AT THOSE MUSCLES BULGE OUT NOW!
LATER
THERE'S THAT BIG STIFF AGAIN, SHOWING OFF IN FRONT OF GRACE AND THE CROWD.
WELL IT'S MY TURN THIS TIME!
WHAM! - NOW IT'S YOUR TURN TO DRY UP AND BLOW AWAY!
OH MAC! YOU ARE A REAL MAN AFTER ALL!

Let Me PROVE I Can Make YOU a NEW MAN!

Charles Atlas

. . . as he looks today, an actual, untouched photograph.

I'll show you how to get the kind of body you have ALWAYS wanted! A big-muscled, evenly-developed physique. A broad, powerful chest. Biceps with SMASH in them. Arms and legs with energy, endurance and SPEED. A powerful back. A stomach ridged with bands of muscle. A REAL MAN'S build that stands out in a crowd!

My body-building method, **"Dynamic Tension,"** changed me from a 97-pound weakling into twice-winner of the title "World's Most Perfectly-Developed Man." Let me prove it can work wonders with your body, too!

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TRY "Dynamic Tension" for 7 days. If, even in that short time, it doesn't begin to show you results you can see, feel, measure with a tape—you don't have to go ahead with it, and the trial won't cost you anything.

"Dynamic Tension" has done so much for me and other fellows that I simply ask you to give it a trial. Make me prove it can make a new man of YOU—start new inches of power pushing out your chest, build up your shoulders to champion huskiness, put new, hard muscles on your biceps!

FREE 48-PAGE BOOK

Gamble a stamp, or a penny postcard. Send for my **FREE BOOK** today. It shows actual photos of skinny, scrawny fellows that I've helped change into husky, brawny MEN. Just put your name and address on the coupon, or on a postcard, and send it to me TODAY. Address me personally: **CHARLES ATLAS, Dept. 910, 115 East 23rd Street, New York, N. Y.**

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I want the proof that your system of **"Dynamic Tension"** will help make a New Man of me—give me a healthy, husky body and big muscle development. Send me your free book, "Everlasting Health and Strength"—and full details of your 7-Day Trial Offer.

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Save up to 50%

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PUT THIS NEW 1941 **14-TUBE CHASSIS** IN YOUR OWN CABINET

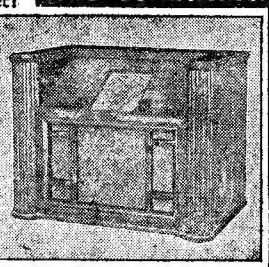
FREQUENCY MODULATION and TELEVISION PROVISION

Now, you can enjoy the mighty power of a 14-tube 1941 radio at the price of an ordinary 7 or 10-tube set!

only $19.95 COMPLETE WITH TUBES AND SPEAKER

14-TUBE CABINET MODEL

$29.95 COMPLETE



AMAZING FOREIGN RECEPTION

You can enjoy brilliant performance and beautifully clear tone. Now, tune in broadcasts direct from distant overseas stations. Big 1941 catalog shows how to buy at wholesale price . . . direct from factory.

Read about sensational new 14-tube cabinet model at $29.95. Also other chassis and cabinet models from 5 to 17-tubes...up to 5 wave bands...including Radio-phonograph-combinations and Home Recorder. ***Write today!***

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SEND 1¢ POST CARD FOR FREE 1941 CATALOG NOW!

GET MIDWEST'S ANSWER TO TRADE-INS!

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Send me your new FREE catalog, complete details of your liberal 30-day Trial Offer and factory-to-you prices.

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Caused by Gastric Hyperacidity

If you are one of those men or women who have "tried everything" and given up hope of relief we urge you to try this effective, yet simple inexpensive way at home. Pain and distress relieved from the start. Numbers report they were saved from expensive operations. If after meals and at night you have pain and distress from Gas, Acid, Sour Stomach, or Ulcers due to gastric hyperacidity write for valuable booklet with information as to guaranteed trial offer.

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Lights cigar, cigarette or pipe—instantly. Never fails. IMPROVED PRINCIPLE IN IGNITION. No flint. No friction.

Send 25c for sample and large can of fluid.

Start now. Agents report big earnings.

NEW METHOD MFG. CO.
Mfgrs. of No Flint Automatic Gas Lighters
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Lights Easily in the Wind

Packed in DISPLAY BOX
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Doz...$1.75
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Earn more every day in the year representing old established firm with a complete line of fast selling necessities: Shirts, Ties, Underwear, Hosiery, Pajamas, Raincoats, Sweaters, Jackets, Campus Coats, Pants, Belts, Breeches, Shoes, Coveralls, Shop Coats, Uniforms, etc. Every item guaranteed. Experience unnecessary.

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ACTUAL WORK ON ACTUAL ELECTRICAL MACHINERY

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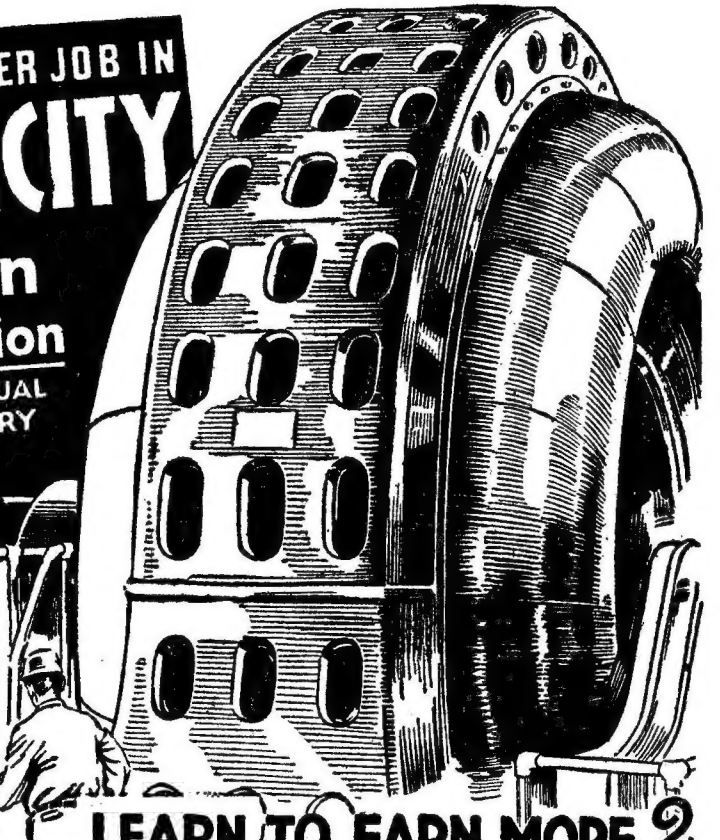

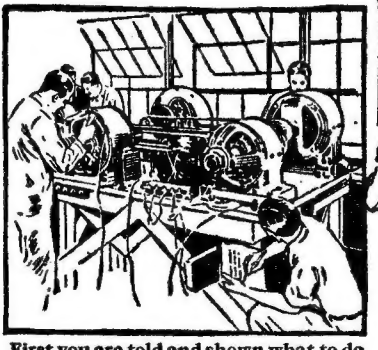

First you are told and shown what to do and how to do it. Then you do it yourself.

LEARN TO EARN MORE?

My big free book tells you how we train you in 12 weeks for your start to a better job and better future.

Learn by Doing

You get your training not by book or lessons but on actual electrical machinery and equipment.

Get Training First—Pay Tuition Later

You can get your training first and then pay for it in 12 monthly payments starting 5 months after you start school or 60 days after your 12 weeks training period is over. Mail coupon for all the details of this plan.

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Let me help you give fine **GIFTS**

I'll trust you – I'll give you

10 MONTHS *to Pay*

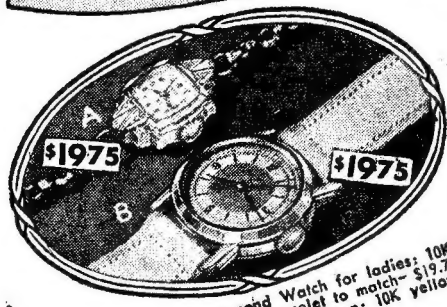
SEND ME $1 – I'll send your choice of these Special Selections for 10 DAY TRIAL on my MONEY BACK Guarantee . . . . . .

I'll help you give fine gifts. Tell me what you want—put a dollar bill in an envelope with your name, address, occupation and a few other facts about yourself. I'll send your selection for approval and 10-day trial. If you are not satisfied that you have received good, honest value send it back and I'll promptly return your dollar. If satisfied pay in 10 small monthly payments.

Jim Feeney
Sales Mgr.

FREE TO ADULTS

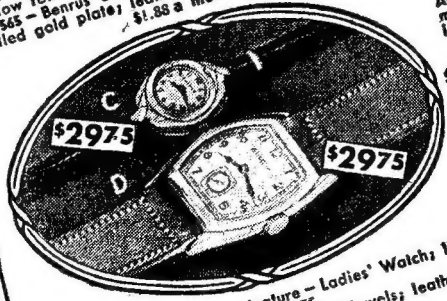
Send for complete 48 page Catalog showing big selection diamonds, watches, jewelry, silverware — all on my 10 Months-To-Pay-Plan.



A-T364—Benrus Sweepsecond Watch for ladies; 10K yellow rolled gold plate; bracelet to match—$19.75
B-8565—Benrus Sweepsecond for men; 10K yellow rolled gold plate; leather strap. $19.75
$1.88 a month

A265—Engagement Ring; large diamond and 2 other diamonds; 14K yellow gold. $4.75 a month

A84/C75—Bridal Set; 8 diamonds; both rings 14K yellow gold.
$3.15 a month



C-R154—Bulova's newest feature—Ladies' Watch; 17 jewel "Goddess of Time"—$29.75.
D-M154—Bulova feature for men; 17 jewels; leather strap—$29.75.
$2.58 a month

I154—Man's Initial Ring; diamond and 2 initials on Black Onyx; 10K yellow gold.
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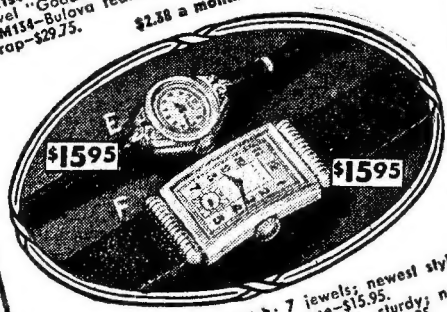

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AMAZING STORIES

TRADE MARK REGISTERED

VOLUME 14
NUMBER 11

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Front cover painting by Robert Fuqua depicting a scene in **West Point, 3000 A. D.**
Back cover painting by Frank R. Paul depicting **Life On Titan**
Illustrations by Robert Fuqua, Julian S. Krupa, Joe Sewell, R. Newman

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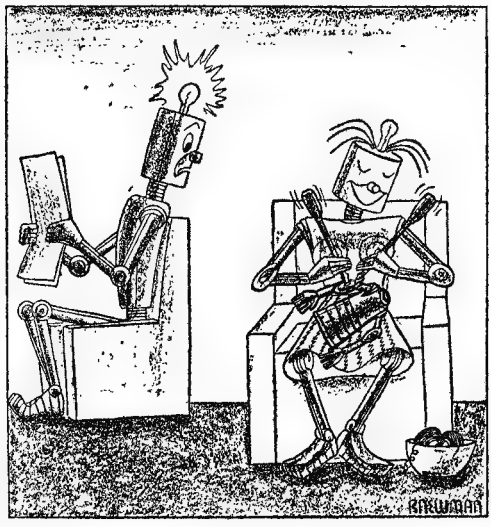
Volume XIV
Number 11

The OBSERVATORY by THE Editor

HOWDY, folks. Here's your editor again with a few ramblings on this'n'that in science fiction. And we mean ramblings! Lot of ground to cover in a few words.

First, it's convention time—or *was*, when you read this. On September 1st your editor is slated to speak before a group of AMAZING'S readers, from all over the country.

That's one of the screwy things about science fiction magazines; they are the only kind of pulp fiction with readers with enough ambition to gang up on the editor—in the flesh! All we can say is we hope the stories have been tops the last few issues. Anyway, you'll get a report via this column next month, on what happened at the World Science Fiction Convention in Chicago.



"Omigod, again—and the price of oil's going up!"

CONTESTS? You love 'em. That's why we're giving you another one next month. It's a new kind of contest, in a way, even though you've been doing it for years. Doing what? Well, wait and see, but you've had lots of practice, so it should be a cinch to win some of those cash prizes. All you'll have to do is write a letter of *criticism*—aha, will you like that!

NEXT January, which means November 10, you'll be reading another of the famous John Carter stories by that world-famous master of science fiction, the one and only Edgar Rice Burroughs. AMAZING STORIES has secured the most asked-for character ever to come from any typewriter, by special arrangement, and "John Carter And The Giant Of Mars" will be the first of three stories about the same character. How's that for a reading treat?

And that's not all. Carson of Venus is coming too, and David Innes of Pellucidar. Mr. Burroughs, who is at present working at Lanikai, Oahu, in the South Seas, is even now taking down the story of Carson of Venus as he receives it telepathically from that cloud-veiled world.

DAVID WRIGHT O'BRIEN, author of that recent popular space yarn, "Suicide Squadrons of Space," has returned from Hollywood, where he went on a writing job for Zanuck. "I'd rather write science fiction," he says. "There's not enough imagination out there yet, for a science fiction writer to become interested in the celluloid city."

Which is perfectly true. Hollywood has yet to learn the true value of imaginative fiction in the movies, and the right way to handle it.

And we're glad Dave came back. We'd hate to lose him.

DUE to the hue and cry for another space ship cover, we've secured another one by Leo Morey, the best he's ever done. It will be used soon, in connection with a grand interplanetary yarn by Don Wilcox.

SCIENCE fiction writers have been going romantic on us lately. Henry Kuttner has married writer C. L. Moore, David Wright O'Brien recently put a diamond where it belongs (we saw it, so we know) and Eando Binder has gotten ideas from Adam and Eve Link.

LESS romantic is the news that Thornton Ayre has been drafted into the British army. It comes as a shock to us, remembering "Locked City."

Rap

WEST POINT,

by

Manly Wade Wellman

Two Part Serial—Part I

BECAUSE the crime was extreme, and the perpetrator probably dangerous, police of the Upper Town were assigned to its settlement—four shrewd and harsh-hearted men.

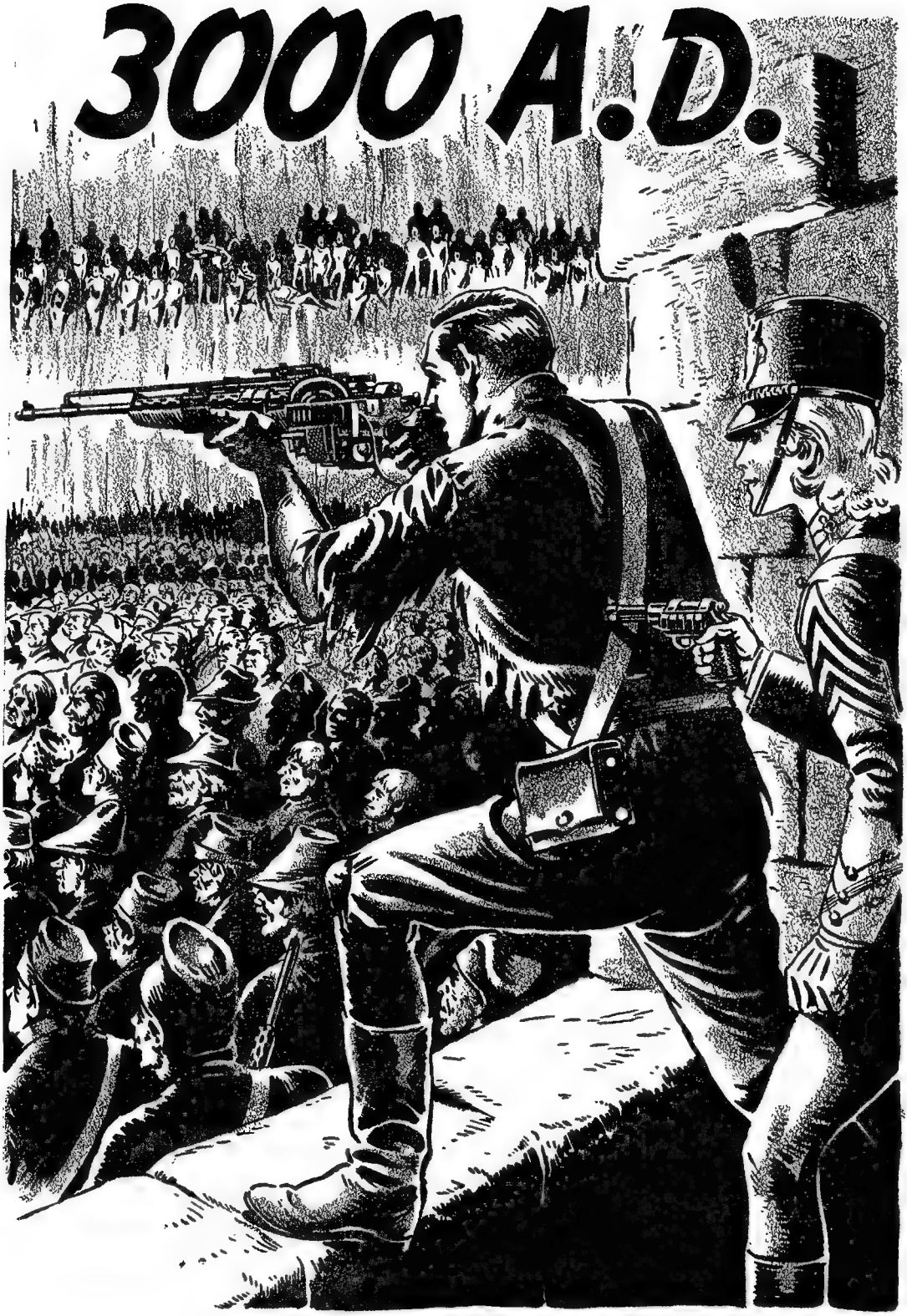
The Sub-Commissioner of police saw them to the threshold of the lift that would drop them to the Underways.

"Since the person was able to conceive and put into effect such an outlawry, it must follow that he realizes its consequences," warned the Sub-Commissioner. "He may be prepared to resist—dangerously. If he makes so much as a gesture of menace, let him have it."

The sergeant in charge of the detail nodded, and slapped the holster that carried his electro-automatic pistol. No doubt in his mind what "it" was that he must let the guilty one have. Perhaps there would be sport in this job, thought the sergeant; sport to balance the discomfort and semi-disgrace of prowling the Underways, so dark and dirty, generally the province of rookie police. . .

The gray metal box of the lift dropped them deep, deep, for whole minutes. The old town of New York, in its fourteen centuries of existence, had been wrecked and rebuilt so often that now, in 2997, its present towers perched gloriously on a great paved

Garr Devlin was a denizen of the Underways, and to the Martian cadets, his entrance into West Point was the signal for war on Earth



Garr Devlin lifted his rifle—and something hard bored into his own back

mountain of rubble, thirty miles wide and six thousand feet high.

Those towers were lofty, gleaming, beautiful—no hint about them of poverty or slums. Such things crouched in the Underways, deep in the heart of the vast metropolis.

The car came to a cushioned halt, the automatic door slid open and the police emerged into a green-lit hollow, faced with dingy old tiling. The air was still, and slightly damp. A rookie cop waited there, rather slouchy but most flatteringly respectful to the sergeant from up above.

"Man's name is Devlin," the rookie reported. "Dynamo tender, thirty years service."

"Does he suspect arrest?"

"I don't know. Come, I'll show you his home."

He led to an exit, beyond which stood a low, simple vehicle, with only a handlebar for control— a sort of raft on wheels. The detail stepped aboard, and the machine whirred away. The green light there was enough for the rookie at the controls, who was used to it, but the visiting officers blinked and stared to make out details of the scene they traversed.

They rolled along an underground tunnel, ten yards wide, one of many corridor-like ways for the cavern-dwelling poor. A few other vehicles moved upon it—official messenger or delivery cars. The ragged, pallid folk of the Underways shambled in throngs by foot, along raised pavements to either side.

The light was dim and green, like the light at the bottom of the sea. One rat-faced sloucher recognized the party as police and shouted something unpleasantly after them.

"He said 'Come the Martians!'," snickered the rookie. "Lots of them still believe that Mars will do something to make life easier for them."

"It's because they hate to live Underground," suggested the sergeant.[1]

Twice the police car passed points where the tunnel broadened into a community center, with wretched little shops to meet such pitiful trade problems as the Underways folk knew.

This was but a small segment of the wideflung, complex burrow-world that lay beneath the feet of New York, and was a maddening mystery of civilization gone wild.[2] Hard though he was, naturally and professionally, the police sergeant squared his thick shoulders and mopped his brow nervously.

"Stuffy down here," he growled to the rookie guide. "Smells like oil—acid —dust. When do we get there?"

"We're there now, sir," replied the man at the handlebar, and he toed a brake. "Here—through this opening at the side. Beyond, there'll be a string of dwelling-holes."

---

[1] In the early days of Martio-Terrestrial commerce, Martian agents preached revolt to the masses until a treaty in 2782 included an agreement to refrain. For countless ages all Martians, no matter what their social status, have been given opportunity to live in the open and absorb the beneficial sun-rays. This fact was often stressed to agitate and discontent the Underways dwellers.—Ed.

[2] "It is a rather terrifying fact that nobody knows for certain how many miles of tunnels and caverns there are, nor how many levels—not even the inhabitants. These latter remain in static communities, grouped close to their subterranean workshops—furnaces, power-rooms, pumps and mills—where they work daily.

"Many have never moved a mile from their birthplaces, the absence of transportation and the bad light contributing to such static habits.

"Some parts of the Underways are lofty and spacious, so that public gatherings are held there at times. Other parts are quite narrow and foul. Several runways skirt the covered-over channels of the old streams—Hudson, East River and Harlem River—that once ran freely about New York.

"There are also sink-holes that lead to unplumbed depths, from which come sounds of motion but no light. It is believed that ghastly creatures inhabit such places."—Report of the Underways Survey Commission, 2848.—Ed.

THEY dismounted, on the floor of the tunnel. One or two fragile forms hurried by, not daring to pause and look at the terrible police.

"Ready for action," the sergeant ordered his detail crisply, and all five policemen moved into a narrower and dimmer corridor. As they crossed the sill of the opening, they felt something like damp chill, that may have been only mental depression at the thought of facing possible violence so far from open air. Each of them loosened the electro-automatic at his hip.

This corridor was no more than four yards wide, and a little less than that in height. Its walls, ceiling and floor were of hardened earth, their surfaces rubbed smooth by centuries of falling feet, scraping elbows. To either side opened door-holes, some lighted as by fires or lamps, others closed with traps of rough boarding.

"Devlin's place is third on the right," the rookie informed them.

"Men," said the sergeant, "remember what the Sub-Commissioner said. This Devlin even narrows his eyes, blast him."

JOHN DEVLIN, born in the Underways of parents who had been born there before him, of long lines of ancestors who had never sniffed outer air or seen sunlight, was fairly representative in physique of his tunnel-dwelling contemporaries.

Pallid, ragged, stunted, frail, he yet possessed a large, high-skulled head, quite bald, with large wide eyes and a good nose, mouth and chin—a head that might be distinguished on more of a body.

He sat in the lamp-lit front chamber of his dwelling-cave, upon a dented metal stool, and spoke to his son, Garr Devlin.

"I'm proud of you, lad," he smiled. "I'd do it all again, if it was to do."

Garr was frowning. His face was like his father's, but there the resemblance ceased. The younger man had thick brown curls, a body of medium height and rugged, healthy proportions, with strong-turned joints and broad shoulders. Only his shabby clothing and fishy pallor would name him as an Underways dweller.

"Dad," he said, "apparently this is the secret you said you'd tell me when I was twenty. That you're a—" His voice broke. "A thief!"

Strangely, his father's head nodded happily in the dim light.

"True, son," he agreed gently. "The idea of thieving should shock you. But I'll repeat what I said—to make you what you are, I'd do it all again. You're a man, as good as any—not a twisted, starved rat in these Underways!"

The older man's hand—gaunt and corded, and lacking three fingers, toll of the machines at which John Devlin toiled—patted the son's arm.

"We're poor, helpless and hopeless, but my father had books, and taught me from them. I was never to forget that our family was something to be proud of, in the old days above the ground.

"I swore to do even better by you. I sneaked up to the higher levels and stole the ray-lamps, the vitamin pills, the vibrators—everything to make you strong, straight, as good as the rich lads in the Upper Town. I stole the books to teach me how to use the equipment.

"Through the years I've dosed you, given you rays and vibrations, and made you what you are."

"Dad," said Garr Devlin slowly, "I'm glad you're proud of me. But that kind of success never came without payment, and—"

"Good boy! I knew you'd think that. And payment's about to be made."

YOUNG Garr Devlin stared. "How can poor people like us pay?"

"By my facing the punishment due me." John Devlin drew his little stunted body up proudly. "I planned to do that long ago. I sent word, by people I knew would communicate with the authorities, of what I'd done."

"No, Dad! No!"

Again the mutilated hand patted Garr Devlin's arm.

"There's another angle to it, son. The investigation will include a checkup of you. They'll see, those Upper Towners, that you're as fine as any of them, and better. They'll take you up among themselves, where you belong, Garr. In the open air, under the free sky—"

"Dad, I won't let this happen to you!"

The wise old mouth smiled, the lofty head shook.

"Too late. The police must be on the way this minute."

As if at a signal, heavy fists smote the door of rough planking. A voice growled an order to open at once, in the name of the law. Then, without waiting, someone pushed the door inward, and in tramped glowering men in black tunics, with drawn pistols.

CHAPTER II

Garr Devlin—Property

"YOU!" grunted the sergeant, in Underway jargon.* "Old man, what name you?"

"John Devlin," replied the father, rising. "No need to dig up that stumbling language—I can speak as good Upper Town as any foreman or superintendent. I'll save you, too, any formal recitation of charges. I stole power-units, ray-lamps, vitamin pills in great quantity, and other things. I'm ready to go."

The sergeant glared at young Garr Devlin.

"Say, do Upper Towners associate with cave-dwelling scum like this old jailbird?"

Garr's pale face flushed in the lamplight, but his father acted as though delighted.

"He does look Upper Town, eh? Normal, vigorous, handsome — educated, too. If you're looking for the pills and vibrations and books I stole, there they are, wrapped up in my boy. I made a man of him!"

The sergeant stood perplexed.

Then: "Bring them both along," he ordered, and turned to go.

"What?" barked John Devlin, and made a scuttering run at the speaker. "My son's not guilty—didn't know of my theft until this very hour—"

"Bring them," repeated the sergeant, and an officer caught John Devlin's gaunt shoulder.

The old fellow writhed his head around and snapped, beastlike, at the wrist. His jaws, toothless but strong, closed on hairy hide. The officer yelled and let go. The sergeant whirled at the doorway.

"Trouble, huh?" he gritted, in the true policemanly manner of the ages. "All right, you old monkey, I'll—"

He struck, but Garr Devlin moved more quickly than he.

A jabbing shove with his hand-heel smote the blow away from the father. Before the sergeant could face the new adversary, Garr lashed out with all four limbs. He jabbed knuckles into the sergeant's mouth, smote him hard over the heart, kneed him in the midriff—and the officer, big and tough as he was, staggered back.

"Hold it!" yelled another policeman

*More than one lexicographer has pointed out the growing trend to jargons and dialects of social, rather than geographical, difference.—Ed.

and rushed in to help. He seized Garr, but the lad swung the edge of his hand, hatchet-wise, against the sergeant's throat, felling him. The rookie who had guided the party leveled an electro-automatic pistol at Garr. And now it was John Devlin who sprang into the fight.

Instantaneously and fearlessly, he hurled his little body before the bigger, straighter figure of his son. The electro-automatic spoke, with a sharp *spat!* like a bit of hemlock wood in a hot fire.

The pellet struck John Devlin, glowed upon his hollow chest for a moment like the bright medal of some very honorable order. Then the little man fell dead beside the stunned sergeant.

Garr Devlin howled like a wolf, and knocked the rookie spinning like a leaf in a gale. In almost the same motion, he brushed aside another officer and dashed from the door.

Behind him rose commanding roars to halt, and a spatter of shots from electro-automatics. These things hastened his retreat, and he gained the mouth of the side-corridor, almost barking his shins against the police car. He had never ridden on one, but his father's books had informed him of the action principle. He sprang aboard, touched the starter, and whirred away down the tunnel and around a bend.

Within seconds he sped through his home neighborhood and into new tunneled stretches. The turns and lightings of the thoroughfares were completely strange, and he did not know the fish-belly faces that gaped from the footpaths to either side. Nervous, he halted the car.

A crowd of scrawny loiterers gathered around his vehicle. The police, pursuing, would be drawn by such a gathering. On impulse, Garr Devlin shouted:

"Scatter out of here, you! This is a police car, on public duty—do you all want to be arrested for obstructing justice?"

HIS voice, his language, his upstanding figure were patently Upper Town to these poor creepers of the gloom, and they scampered away like insects before a strong light. Left alone, Garr sprang down from his captured scooter, searching right and left with his eyes.

He saw what he wanted—a great metal trapdoor in the rough, damp pavement, dimly glowing in the soft green radiance of the roof-lamps. Stooping and heaving, he lifted it up and back. Below was blackness, as deep as starless night.

Garr Devlin had a sense of unknown abysses at his feet. A whispering draft of cold air beat up to him.

This was one of the ways never explored, with lost catacombs below where—did the old legends speak truth?—lived other and more darkling races, whom even the Underways remembered only with fear and disgust.

But there was no time to speculate. Garr gave the vehicle a push, a heave—it was a tight fit in the opening, but the scooter went in. There was a greater rush of air from the dark depth, a faint *swish-thunnng* of departing sound, a remote crash; then silence.

Perhaps a yell drifted upward, a far-away animal yell. But that might have been Garr Devlin's imagination.

Dropping the iron trap again, the young man hurried away on foot. He came to a broadened cavern, with dingy stalls, a few shoppers and the cross-barred door to one side that bespoke an elevator.

Several men in threadbare work clothing waited, as if to be whisked to the machinery or digging that constituted their life careers. Garr moved

forward to join them.

The door opened after some seconds, and the workmen filed in. A stunted foreman moved to keep Garr out, then looked at him again.

"Upper Town?" he asked. "What name you come here? We no like—"

"Don't be insolent," snapped Garr. "I'm a policeman." He remembered his wretched Underways clothing. "Policeman—undercover," he amplified. "Let me in, and don't keep me waiting."

It worked again. The lift soared upward with him. When it stopped at a level above, the workmen stamped stodgily out. Garr was left alone with the operator, and realized that he was being stared at.

He tried official insolence again.

"Well?" he growled; but the elevator operator, lean and freckled, was not to be faced down.

"You can fool those Underway moles about being in the police," he said, "but not me. Where's your badge? And your gun? And what was that yelling I heard off in the distance when you were getting on? Probably the only police connection you've got is that you're wanted."

He put out a hand and touched a button. The lift paused, came to a halt. But, before the operator could send it down, Garr had seized his shoulder and flung him against the steel siding. A straight, venomous smash on the mouth jerked back the freckled head. Its pate rang against the metal. The operator went limp and fell on his face, knocked out.

Garr seized the controls. His finger drove at the button that would send him on up to the high levels and escape; then grim thought rushed upon him, staying his action.

Below was police pursuit. Among the pursuers moved a man with a pistol, and from that pistol one round had been fired—the pellet that had slain his father, John Devlin. Because of his father's love and ambition he, Garr Devlin, now looked and thought and acted like a dominant human being and not a warped animal. His father had died for him, too—a death that went thus far unavenged.

Garr Devlin touched a button on the control panel. It was the button that dropped the lift down again. . . .

THE police were angry—outthought, outfought, three of them bruised and shaky. Their scooter had disappeared, heaven and the escaped quarry alone knew where; and now the lift was slow.

"Here it comes," mumbled the sergeant grumpily. "We'll go up. Wish we knew how to explain all this to headquarters."

The indicator showed that the cage was stopping. The door slid open—and a shabby figure bounded out among them.

Unprepared, the sergeant stumbled back from a stiff-armed shove. The others sprang to right and left, drawing weapons. But Garr Devlin had no eyes or thought save for the rookie cop. In Garr's hand was a lever-bar wrenched from the side of the lift controls. It whirled above his head.

"You killed my Dad!" Garr accused, and struck.

The bar cleft scalp and skull, scattering the brains beneath. The rookie collapsed. Next instant, Garr Devlin, clubbed in his turn, fell across the body of his father's killer.

HIS WITS found their own way back, slowly. He looked up into a square, serious face with direct eyes and an expressionless mouth.

"I am Dr. Melcher, of the local committee of the World League Personnel

Division,"* the owner of the face introduced himself.

"I'm Garr Devlin," growled back the youth. "What happens to me?"

"To begin with, you're guilty of killing a police officer—"

"He killed my father, and tried to kill me," broke in Garr wearily. "I could have escaped, but I went back to fight it out, deliberately. So get on with the execution, or whatever it is." His eyes closed again.

"You aren't to be executed," he heard Dr. Melcher say; and then Garr sat up on the cot where he had been dumped.

"What then? Some cat-and-mouse game? I don't understand."

"I'll inform you. Your father stole much valuable government property, employing it to improve you greatly, both physically and culturally." The wise eyes studied Garr. "Your person and your mind represent whatever equity can be recovered of all that illegally appropriated material."

"So you'll spare my life?" finished Garr Devlin for him. "Put me to work, I suppose, as street cleaner or mechanic?"

"Neither street cleaner nor mechanic. You belong to the government, and a quick examination of you has suggested the place you'll best fit."

Garr felt better, and more savage.

"I'm supposed to thank you, am I?"

"Not at all. Your dead body would be only so much carbon, sulphur, iron, calcium and so on. Alive, you possess certain qualities of specific value, which can be developed and utilized. Have you heard of West Point?"

Garr stared and gaped. "Don't tell me I'm to go there!"

"To any other young man, an appointment to that place would be an honor. To you, it's a command. We're sending you as a ward of the government, to be a cadet and later a special officer. Your service will indemnify us for the stolen property which has gone into your present development."

CHAPTER III

Life With Discipline

HIGH on a coping of the gargantuan truncated pyramid that houses West Point, Earth's school of military training, stood two figures. They gazed far out across the green country, that by governmental decree was kept clear of dwellers and had grown up in wild woods and meadows. To the east flowed the Hudson River, clear of traffic for centuries.

"You can now appreciate the Point's favorable isolation," General Rakkam, the lean, gray superintendent of the school, was saying to his companion.

"Our only communications are pneumatic travel and supply tubes to New York. The cadets spend their lives and energies at study and training—there's nothing else for them to do. Thus they complete in two years a course that once extended to four."

"It ssoundss Marrtian," purred the other.

He was a man of Mars, with a head like a chrysanthemum and a strange body draped loosely in a robe, with gold threading to mark him a representative of his government.

"I feel that ourr own young sstudentss will learrn much."

To Rakkam that last remark sounded ambiguous; it was even more so than he suspected. As he slurred out compliments, the Martian officer gloated in his secret mind over the true reason for Martian cadets being sent here.

*In 2389, the nations of Earth formed the World League, with president and central governing body.—Ed.

True, the Ekadome* government was friendly to Earth, but the Martian army formed a different political faith. Martian militarists still rankled under the memory of 2776, when their forbears had sallied smugly forth to devastate Earth and had been fought to a draw.

The time was ripe, they now told each other quietly, to try it again, profiting by old mistakes to gain old objectives. Thus, the Martian cadets sent here were hand-picked. The time was near when there might be a change from the Earth-favoring policy of the Martian ruler.

At that time of change on Mars, might come also change on Earth—and young students, who would already have learned the enemy's military secrets, would form the nucleus of a fighting force right at the heart of Terrestrial military operations . . .

"Look, a grroup of people farr below," said the Martian official, leaning on the coping.

"New candidates—the male ones, that is. As you know, we have female auxiliaries. Your own first contingent of Martians is with that group."

General Rakkam gazed down on the gathering at the meadow's edge, just outside the great arched doorway.

"Three hundred young men in all. Most of them are descended from old army families—some in a straight male line of one thousand years in the service."

"What of thosse who arre not sso desscended?" inquired the Martian visitor.

"They are generally very unusual young men."

DOWN BELOW the two who were speaking, Garr Devlin stood silent and surly in the midst of the cheerful, expectant crowd. Ever since a rocket cab had hurried him here, he had refrained from even noticing his companions. He tried not to wonder what waited inside the immense stone pyramid, a single gigantic structure with floor upon floor of chambers, workshops, arcades.

An orderly, snugly uniformed, moved through the group, checking names and credentials.

"Inside," he pronounced briskly, and the doors opened.

The orderly formed the candidates in column of twos.

"Leave personal luggage. Forward, march!"

They tramped in after him, and halted in a bare metal room, exactly cubical and without furnishing, big enough for all three hundred.

"Strip!" commanded an officer, and the newcomers obeyed, then formed a triple rank. The officer spoke again.

"You have been chosen, very carefully, to be candidates for admission here. Rigidly tested, selected and taught, you will belong to your military profession. Deviation from the program set down for you will be punished by loss of privilege, by confinement, expulsion, or — worse things. You're in the army now. Any questions?"

"Yes," promptly replied one naked youth, stepping from the front rank.

MUSCULAR, a trifle more than medium-sized, the candidate might have been the finest specimen there save for a strange pallor.

"If a refusal to accept these conditions is made, will the cadet who makes it be rejected?"

The officer looked at him closely. An orderly handed him the roll list, and the officer checked it quickly. He spoke again, crisply.

"In most cases, yes. In your case—

* Ekadome—principal city of Mars and seat of its government, situated at the oasis called by Terrestrial astronomers Solis Lacus.—Ed.

I divine your reason for asking—other punishment would be inflicted, because of your special situation. You are Candidate Devlin, who has been sent by the government."

The young man glared, planting his feet wide.

"Back in ranks," commanded the officer. "You are guilty of service laxities which all cadets, even new ones, must avoid. Address your superiors hereafter in the third person, not the second. Salute before and after speaking. Adhere to all instructions in military courtesy. Any other questions? . . . That is all."

A second orderly marched the candidates away to a huge supply room where, from behind a long bench or counter, uniforms were issued.

Garr Devlin glared at the garments placed in his hands—plain and of stout gray synthetics, tunic, breeches and half-boots of soft leatheroid. Uniforms meant regimentation. West Point was trying to make him like all its other cadets. He felt the pressure of discipline like a weighty hand.

"Parrdon," slurred a voice in his ear. "I hearrd you addresss that officerr. We Marrtianss can ssympathizze with you, Cadet Devlin—maybe even help you."

Garr had barely noticed the dozen Martian cadets of the group. The one who had come to his elbow had dropped his robes and now appeared like a grotesque metal statue. His bladder-body and tentacle-limbs were encased in metal sheathing to hold him, roughly, to human shape and erect stance.

His head, shaggy with sensitive tags that housed the Martian awareness-sense,* was borne erect and its breathing hole held an artificial voice-box. The Martian's skin was of a toad-green, thick and wartlike, and his eyes protruded like hard marble balls.

"I have to take this treatment, but I needn't like it," muttered Devlin in reply, and the Martian nodded swiftly and drew back.

Devlin remembered the old tales of Martian sympathy for the Underways folk. Was this evidence of it? Or did the Martians seek service of him? The cadets from the other planets clung close together, evidently conferring in silent telepathy. He felt more friendly toward them than toward his fellow humans. Martians, at least, did not set themselves up as judges and rulers.

Uniforms donned, the cadets marched to a dining hall. Tables were set with nourishing synthetic foods—jellies, biscuits, drinks: a hearty balanced ration.

At Devlin's left sat a tall roan-haired candidate named De Vigny; at his right, a sturdy youngster with a broad coppery face and black hair—Diasu, one of the Eskimo race that in the past few centuries had given the world outstanding technicians and philosophers. These cadets would be, by accident of alphabetical order, Garr's closest companions henceforth.

Rising after the meal, Garr paced around the hall. He approached a table at the far side, where the diners were also rising. After his first good look at them, he came to a halt, amazed.

They were young like himself, dressed in cadet gray like himself—but they were girls.

The nearest met Garr's stare with gray eyes, startlingly pale in her oval tanned face. Her hair was almost as black as Diasu's. She seemed to smile—in scorn or friendship.

"Hello," said Garr informally, as he would have spoken to a girl of the Underways. "So there are women in the army, too?"

* This Martian awareness-sense approximates all five Terrestrial senses, and is the key to their telepathic powers.—Ed.

"Didn't you know that?" the brown-faced girl demanded softly.

He shook his head. "But if I had known, I might not have hated coming here."

GARR felt foolish, at the same time elated. His own face must be reflecting plainly the admiration he felt for the girl. Her slim sweet figure in its snug uniform stepped closer to him. Was it possible, he wondered, that she felt sympathy for a lonely, somber stranger?

"Well, candidates and first-year men aren't allowed to speak to auxiliary cadets except in line of duty," she said. "Keep your eyes front, and mind your own business."

All this in the same soft voice, without anger, as though she were reminding a tradesman that he had made a mistake. Garr's pale cheeks flushed.

"I don't care for rules," he snapped. "Nor for you, or anything you say!"

His quick anger did not permit him to realize how he lied, that in truth he would like to know this gray-eyed girl better. But, as he spoke, a hard hand clutched his elbow. He spun and found a face thrust close to his—his late dining neighbor, De Vigny.

"Stick to regulations, you Underways rat," snarled the other candidate. "If you're bothering this auxiliary—"

Garr was grateful that a man had butted in. He gestured toward an adjacent doorway.

"Step out here, De Vigny," he said.

With no other word, the two young men walked out into a metal-lined passage. Garr took one look, to be sure nobody would witness; then he flung himself upon his enemy.

De Vigny, unprepared, wavered before three hard, swift blows on the jaw. He fell back against the wall, and Garr's left hand caught him by the throat, pinning him there. Garr's right fist drove hard into the middle of the face. De Vigny's roan head snapped back against the metal, and he fell as if he had been clubbed.

Wolflike, Garr flung himself upon his fallen adversary. Half-stunned, De Vigny could ill defend himself; but, as Garr lifted his fist to strike yet again, a hand hooked in his collar from behind, dragging so that it choked him and heaved him away from the prostrate De Vigny.

Snorting an Underways oath, Garr writhed loose and rose to attack the newcomer, who stood before him. It was the girl who had snubbed him, who had come into the passageway and helped his enemy.

"He called you a rat, and he was right," she said sternly. "Only low, sneaking animals jump on someone who's down."

"Clear out," Garr almost roared in his white rage. "You forced this on me. First I thought you were beautiful, but now—"

She slapped his face, full-armed and hard. Then she waited for what he would do. He did nothing, and with a final glare, the girl turned on her heel and reëntered the dining hall. De Vigny, on his feet again but very shaky, followed.

Garr waited alone, hand to his cheek. If thoughts could kill, that departing pair would have withered and died on the threshhold.

"You did well, frriend," purred a voice close to him.

A Martian had witnessed it all—a Martian cadet, new-uniformed in gray, who must have hovered unobserved on the fringe of the whole incident. The creature's voice-box managed a laugh-like cackle.

"You strrike like a forrge-hammerr,"

the metallic voice went on. "I ssay again—we Marrtians feel ssympathy forr you. My name iss Bexlann. Rremember it. We sshall talk again."

"About what?" said Garr savagely, unable to reply gently even to overtures of friendship.

"Ourr mutual help and prrofit. Laterr. Come, they arre asssembling the cadetss insside."

CHAPTER IV

Revenge on a Woman

THE new cadets found their every hour filled with studies and duties. They must eat, sleep and work on schedule. They had hard courses of study — mathematics, science, languages, mechanics and engineering, and many other things. They spent daily periods in gymnasiums, where experts trained already competent young bodies into prodigies of endurance and strength.

They also underwent, for sake of discipline, the ancient close-order drill of the army, under the barking command of upperclassmen.

But one of them, at least, had the time and energy to preserve his undiminished hate and rebellion for everything in West Point.

Garr Devlin found himself assigned to a living-cubicle with De Vigny and Diasu. The former made a handsome effort to let bygones be bygones.

"Since we're living together, Devlin, let's be friends," he offered. "Maybe I was hasty in telling you off. You were hasty enough in licking me."

Garr nodded, but a little coldly, and was equally cold to the chatter of Diasu who, as the son of an old West Pointer, had prepared for his cadetship since birth and was full of West Point knowledge and tradition. Next morning, the three of them attended their first class together.

It was basic science. Garr, determined not to conform, was not softened at heart when he saw that the brown-faced girl of yesterday's incident sat in the row before him. Her name, the list showed, was Nola Rakkam—undoubtedly a relative of the superintendent.

Garr was called upon to recite and gave a deliberately wrong answer, sneering at the officer-teacher. After class, he glared at the girl, who walked past him without taking notice. But someone else fell in step beside him as he left—Bexlann, the Martian cadet.

"We Marrtianss can rread mindss," said the creature. "That iss, mosst mindss. Yourrss iss a blank to me. I wonderr if you rreally meant to fail in yourr classs."

"And if I did?" responded Garr.

The shaggy head wagged. "Why not prrofit frrom the enemy, Devlin—gain knowledge to usse againsst him in time of need?"

"You approve of my hating West Point, perhaps injuring the institution?"

They were quite alone in a winding corridor, and Bexlann dropped his purring voice.

"I do apprrove. I will even help."

But Garr had thoughts of his own to deal with. He excused himself and wandered off alone. His face was set. Auxiliary Cadet Nola Rakkam needed to be taken down a peg.

"I'll face her alone, tell her what I think of her and this school," he vowed to himself.

How to face her was the next problem. He wanted her alone, without officious cadets like De Vigny, or sentries or officers, to array themselves against him.

He walked through the halls and passages of the first level of the big struc-

ture, where the first-year men were obliged to live and study. Shortly he reached the northernmost limits of his prowling, a great corridor from east to west of the edifice and as wide as the street-tunnels of the Underways.

At one point was a double door in the north wall, marked ARSENAL. Further along, a similar double door bore the legend: CLOSED TO MALE CADETS.

Beyond that door, then, the female auxiliaries had their living quarters. If he could get in, find Nola Rakkam . . .

Garr Devlin grinned, and looked at the big lock. No sentries or strollers were near at hand, and he produced a combination pocket knife that had been issued for use in his laboratory classes. Besides cutting blades, scalpels and hooks, it had a long, lean probe. This he thrust into the keyhole.

Something yielded, but not enough. He withdrew the probe, and saw upon its point a gouged-out bit of white, soft metal.

Such stuff was alloy, intensely susceptible to light rays and used in engines employing solar energy. Garr had studied about it, under his father.

"So the lock operates by use of light," he mused. "I'll get a light and force it."

RETURNING to his room, Garr found both De Vigny and Diasu providentially gone. With a radium-ray torch, used by the Eskimo as a pipe-lighter, Garr treated a particle of the lock metal. Watching through a lens, he saw the little portion melt into vapor.

"Too much," decided Garr, and he used half the power of the light on a second bit. It crept back before the ray, but was not destroyed.

Now Garr rummaged in a cupboard and brought forth a stop-watch, issued for use in the astrophysics laboratory. Painstakingly he experimented. It was hours before he was satisfied—a forty-eight unit ray, used for twenty seconds, would do the trick.

That night he lay awake in the dark until the officer of the day passed his door. De Vigny and Diasu were asleep. Rising stealthily, Garr crept forth, along the darker passageways toward the locked door.

At corridor crossings were sentries on patrol, and Garr taxed his utmost powers of stealthy maneuvering to avoid them. At length he came to a passage mouth just opposite the door he sought. Before that door stood a guard, a soldier of the army of the Terrestrial League, hands crossed on the muzzle of a grounded electro-automatic rifle.

As Garr looked forth, he heard stealthy movement behind him. He glanced back. Narrow limbs, cylindrical body, petal-shaggy head—Bexlann!

Swiftly approaching, the Martian cadet touched Garr's elbow with a tentacle.

"You intrrigue me," he whispered harshly. "Asss I ssay, I cannot rread yourr mind, but I rread yourr ssensse of rrebellion. Perrhapss the time iss rripe to explain to you—"

As before, Garr's mind was too full of another thing to listen.

"I'm glad you came," said he—and grappled with Bexlann.

Before the Martian could resist, Garr had jerked him bodily from the floor and with a great heave sent him toward the mouth of the passage. Bexlann gurgled and purred in dismay, and barely kept his metal-shod feet as he staggered out into full view of the sentry.

"Halt!"

The rifle snapped to the ready in the man's hands. Bexlann, awed by the

weapon, stood still. He only yammered—his voice-box had been displaced in his throat by the violence of Garr's wrestling.

"Oh, a Martian!" and the sentry grinned fiercely. It was plain that he did not like Martians. "Out on a prowl, eh, after lights out? Come along, the officer of the day will handle you."

Contrary to regulations, the man left his post, escorting his prisoner along the passage. The moment his back was turned, Garr was at the door, the radium-ray at the key crevice. His eye fixed itself on his stop-watch. Ten seconds—fifteen—eighteen—twenty—the door opened, and Garr was through it.

He was in another corridor, the exact match of the one he had quitted, except that it was lighted in yellow and totally deserted. He walked along it. At a little distance was a listing of names. He studied it.

Auxiliary Cadet Nola Rakkam occupied a living-cubicle by herself, one hall along the way and fourth in line. Garr felt a fierce exultation. Already he tasted the triumph of the scathing denunciation he would pour upon her.

He found the door, stood before it in the dim light and knocked.

"Who's there?" the girl called from within.

Garr made no answer, and she opened the door, coming out to confront him.

Her gray eyes, level as ever, blinked but once. She was not afraid of him.

"Oh, it's you—Cadet Devlin." Her voice was as stern as that of a commissioned officer. "You've broken a very important regulation—"

"I meant to," he cut her off savagely. "Let them find me here and dismiss me. But first I'm going to tell you my honest opinion of you."

She drew herself up. "I don't have to listen, but I'm not afraid to," she replied. "I know all about your case—"

"Yes, it's quite a celebrated one. I'm here against my will, for training into a useful servant. You knew that, and you stuck a barb into me to make me know you knew!"

"Wait," the girl put in, shaking her head. "I didn't do it for that. You don't understand."

"No? Why, then? Tell your silly story."

HER eyes glared as palely as white-hot iron, but her voice was steady.

"I saw you—noticed you—the moment you appeared in the dining hall. You stood out from the party at your table. I saw a proud, bitter face, with character and intelligence in it. Later, when you came up to me and began to speak, I was terrified."

Garr laughed in cold disdain, but the girl insisted.

"It's true. I was reared in this West Point tradition—I know how well regulations are kept. I tried to speak sharply, to warn you. Then that man De Vigny interfered—"

"Yes," threw in Garr, "and you helped him!"

"I had to. You fought unfairly. You can't do that."

Again he laughed. "Apparently I did it very well. You want me to believe, then, that you had sympathy, wanted to help me?"

She shrugged her shoulders under the gray tunic.

"Since you're so set in your mind against me, believe what you will. Anyway, we're both in a jam. If you came here to get me dismissed from the Point in disgrace, you've succeeded."

It was Garr's turn to protest.

"Hold on! You say I fight foully, but I'm not that foul. No, I only wanted to tell you—" He broke off, for he had not told her any of the deadly things he had prepared.

"It's too late," Nola Rakkam said quietly, looking over his shoulder. "We're discovered."

Two men hurried up, the officer of the day and a sentry.

CHAPTER V

The Outcome

"ARREST them both," said the officer.

The sentry, a regular like the one who had seized Bexlann, held his rifle ready.

"Come along," the officer commanded, and the sentry motioned them to march ahead, down a corridor and to an automatic lift. They rode up several floors, and the officer locked them together in a small ironplated chamber. As the door closed, the girl faced Garr.

"You were saying something," she prompted him coolly.

Garr flushed. "Yes. I thought of revenge, but not that kind. If you want to stay in West Point—though I can't imagine why—I'm not going to get you kicked out. But haven't you some pull with the superintendent?"

"I'm his daughter." She moistened her lips with a little pointed tongue. "That may get me some consideration—not enough, I'm afraid."

"Don't worry," Garr said. "I'll take all the blame. I'm not being noble, just honest."

The girl leaned in a corner, her slim booted legs crossed.

"Do you realize," she said, "that you're a marked man here? That, if the authorities wish, they can put you in prison—even execute you? Or send you back to be prosecuted on that murder charge?"

"Let them kill me," he growled. "West Point can brag that she's killed a man, then—a man who never wanted anything but a fair deal, and never gave anybody a deal that was dirty."

At this moment, the officer reappeared and opened the door.

"Follow me," he commanded. "You're wanted at the office of the superintendent."

More corridors, another lift, and finally a door in a hallway close to the top of the pyramid building. The officer ushered them into the room. Behind a brightly lighted desk sat the hard, serious General Rakkam. Garr, seeing him close for the first time, observed that his eyes were as gray as his daughter's.

General Rakkam sat in an arm-chair, clad in spotless white. He held a written report between his fingers.

"Auxiliary Cadet Rakkam," he said, "this is not worthy of you."

"If the general please," put in Garr Devlin at once, "this isn't her fault. I forced the door and stumbled in upon her. She did not dream—"

General Rakkam did not even glance at Garr.

"How long," he asked his daughter, "have the two of you been meeting secretly?"

"We have never met secretly, sir," she replied.

"I see what's in your mind, sir," cried Garr, so sharply that one would think the general, not he, stood trial.

"You think she's lying to escape, and that I'm lying to shield her. That is not so. I simply felt that your daught—that Auxiliary Cadet Rakkam was a symbol of what I hate in this school. I wanted to tell her so to her face. That is all."

"General," put in the girl suddenly, "I think that West Point would be foolish to penalize this cadet."

Rakkam glared. "Granting you had the right to make recommendations—and I do not grant it—how do you up-

hold that interesting conclusion?"

"Because he's not been treated fairly," she plunged on. "He was forced here. By design or accident, he was made to feel that it amounted to imprisonment. I myself had a hand in it. But now he's striving to clear me, with no thought for himself."

The girl faced Garr. "Cadet Devlin, you could tell a lie and make my father hush this up for my protection. But you don't hide behind me. No, you take all the blame. If I'd known you better—the only cadet I ever heard of who wasn't all uniform and self-importance—I might have shown you more courtesy."

"Nola!" broke in her father. "You forget your duty—"

"My duty is to learn military science and tactics, sir, and to help my government. I am trying to do so by helping Cadet Devlin, an asset to any service. I think he is a decent gentleman and should be treated as such, not as a convict in a prison."

That last was Garr's own attitude, and he thrilled to hear Nola Rakkam uphold it.

GENERAL RAKKAM touched a button in his desk. To the orderly who appeared, he said:

"Fetch one of the Martians at once."

The Martian was brought. For a moment Garr thought it might be Bexlann, but this was a stranger. He stood behind the general's chair, studying the two young people. His purring voice made itself heard:

"Thiss young woman tellss the trruth, ssirr."

"And the cadet?" prompted General Rakkam.

"I cannot be ssurre. He is a sstrrange individual — therre iss some ssorrt of defensse b e t w e e n hiss thoughtss and me."

Rakkam appeared interested. He dismissed the Martian, and spoke to his daughter more gently.

"You stand acquitted of any breach of regulations. Return to your quarters, and say nothing—this is an order —nothing of what has happened."

She was gone, with one backward glance at Garr. Left alone with the superintendent, the young man looked his most defiant.

"Cadet Devlin," said the general weightily, "yours is a special case. I have observed it with interest. And, though that Martian could not read your mind, I will attempt to do so. For one thing, you are not quite as savage now as you were."

"Your daughter spoke very kindly, sir," nodded Garr.

"You don't consider her, then, an embodiment of oppression and vanity?"

"Not now, sir. In fact—in fact, I would like to make some sort of amends to her, as she did to me." Garr meant that, and the general knew it.

"Suppose, Cadet Devlin, you abate this spirit of rebellion against discipline."

Garr's face fell, and the general continued:

"The most recent item of your unusual character to interest me is that Martians have difficulty in reading your mind. Ah—before I say more, let me remark that I know how solemnly the people of your Underways regard a formal oath."

"They do that, sir," agreed Garr. "None of us breaks a word solemnly passed."

"I am gratified. Will you, then, swear not to reveal the offer I am going to make? . . . You do? Then listen."

The general's gray eyes fixed Garr's as he went on.

"At this institution there is a certain quiet course of instruction, given to

picked cadets and kept secret even from other members of the corps. It is Secret Service—Army Intelligence. Will you join?"

Garr looked at Rakkam. Here, he recognized, was an unparalleled opportunity to learn valuable things, that might arm him against future struggles in a life that seemed all too grim for an Underways youth charged with murder. He remembered Bexlann's advice to profit even by the teachings of enemies, and just now Rakkam and West Point seemed less harsh. The general was continuing:

"It is my intention to include Auxiliary Cadet Rakkam in the same class."

Garr kept his face from shining.

"I will do as you say, sir," he announced.

NEXT DAY, according to instructions, Garr Devlin reported to the first-year library. It was a great labyrinth of book-stacks, on every conceivable subject. In the rear stalls a regiment might stand hidden.

The attendant took Devlin's name at the desk, seemed to understand, and motioned him toward the darkest of the book-lined passages. Wondering, Garr walked along it, his Underways eyes showing him the far end dimly. Here the books seemed wedged together on a narrow tier of shelves. He paused, at a loss what to do.

Then the section of shelves moved silently away before him, disclosing a recess. He stepped in, and a small elevator whisked him up, up, until the top of the shaft was reached and a slide door opened. He emerged into a lighted corridor, and there before him, her arms full of books, stood Nola Rakkam.

"It's Cadet Devlin!" she almost cried. "Are you also—"

"In the Intelligence Class? Yes. Assigned last night."

"So was I. Let's go in together."

THE classroom, it developed, was behind the office of the superintendent, and General Rakkam himself taught the ten cadets—eight men and two auxiliaries — who made up the group. The study was harder than Garr had dreamed possible. Even basic preparation included criminology, cryptography, disguise and special psychology.

Each student must also take a stiff general course in the regular school. And the superintendent called all this mountain of training "negligible".

"You are selected for natural aptitude," he insisted. "Good Intelligence officers are born, not made, just like poets and championship athletes. An operative ranks any similar rating in another branch of the army service, and he should deserve that distinction."

He took occasion to speak to Garr alone.

"Mind if I change your living quarters, Devlin?" he asked.

"No, sir," replied Garr, who was still awkward in De Vigny's presence.

"Very good. You will be assigned to a room with two of the Martian cadets." Rakkam spoke with official earnestness. "Your mind is blank to them. I want you to observe, Devlin, and report to me. It has not escaped me that there is a certain scorn and distrust of Terrestrial method among Martians.

"The exchange student plan was initiated as a promotion of understanding, but it may lead to something quite contrary. There is a plan, I think, to discredit our service school here—make us lose prestige before other world governments."

"I will do my best, sir," said Garr.

When the transfer was made, that

same evening, Garr was met at the door by no less a personage than Bexlann himself. Bexlann had already been notified of the arrangement.

"Why do you come herre to live?" demanded Bexlann at once.

"Because I think I like Martians," said Garr, as he had been told to say by Rakkam.

He entered the cubicle, where another Martian cadet, Zaang, paid him suspicious attention.

"I asked for this transfer."

"Do you not also like your fellow-Terrresstrrialss?" slurred out Zaang.

Garr shook his head. "They are scornful of me because the accident of birth put me in the Underways," he made reply.

That was his own inspiration, and it bore fruit. Bexlann came to his aid.

"I am inclined to welcome thiss cadet," he told Zaang, speaking audibly as a courtesy to Garr. "He iss the sspecial case that has attrracted sso much attention—"

"Oh," interrupted Zaang eagerly, "the one who fought on hiss firrst day herre—who rrebelled—"

"The same," Garr assured him, and Zaang held out a tentacle to him, imitating limply a Terrestrial handshake. Plainly the Martians applauded and approved Garr Devlin's dislike of West Point.

Shortly other Martians appeared, summoned by telepathic messages from Garr's roommates. They, too, were cordial, and the inclusion of a Terrestrial comrade in a corridor inhabited by Martians only was made a reason for what amounted to festival.

All asked questions about the Underways, though these Martians appeared to know much more about those dark tunnels than most upper-class Terrestrials. And all exclaimed in surprise over their inability to read Garr's mind.

"Such cases arre rrarre and interessting," pronounced Bexlann. "I have given the phenomenon ssome thought. I am inclined to feel that it iss due to the grreat mental disscipline Cadet Devlin hass known ssince hiss earrliesst dayss."

Others agreed, and a new subject was introduced—the possibility of making Garr a participant in their telepathic communications.

"With ssuch an orrderred mind, machinerry might help," suggested Zaang, "and ssuch a machine can be prrocurred. What do you ssay, Devlin?"

"That I am interested," replied Garr. And next day, in his class under Rakkam, he took occasion to tell the superintendent about the suggestion.

"I'm interested, too," commented the superintendent. "Find out about the machine, and put off the use of it. Report to me again."

GARR forgot his earlier rebellion against study, and made progress in his class. On the last day of his first week, Nola rode down on the hidden elevator with him, and asked him to pause in the secluded rear shelf-passages of the library.

"You're a leader in the courses, I hear," she praised him. "I have seen the marks — both in the Intelligence class and in the others, you're at the head of your sections."

"Must I remind you," he mocked her pleasantly, "that male cadets and auxiliaries—"

"Nobody hears us talk just now, Cadet Devlin," she smiled.

"Then why stick to formal addresses. We're friends all of a sudden. My name's Garr—and yours is Nola."

"Very well—when we're alone," she assented, and they left the library separately.

Garr's head was still buzzing with

thoughts of the girl as he came to his living quarters. In the cubicle were Bexlann and Zaang, their tentacles busily shaping something on the table between them. They both greeted him cordially.

"It iss to be hoped," said Bexlann, "that the matterr we have touched upon —mental communication between you and uss—can be adjusted at lasst."

"Indeed?" said Garr, coming forward. "How?"

"With thiss delicate arrrangement to a m p l i f y thought-wavess. We have worrked upon it all week, accorrding to modelss known to Marrtian sscience, and with parrtss ssent uss by frriendss at ourr embassy."

Garr looked at the device. It was a metal head-band, with sensitive disks placed where they could press the temples of the wearer. Batteries were attached to give vibration power, and a network of wires, crossing and re-crossing the top of the head, set up a field of force involving the whole brain-pan.

Garr was eager to test the device, but declined; after all, he had vowed to keep secret the special class he attended, and this thing would give his thoughts to the Martians.

"I have guilty secrets," he joked.

"If we sshould pay you, forr yourr help in the experriment—" Bexlann got that far, and broke off. "It iss a powerr worrking both wayss, Devlin. You could rread my mind, too."

"Let me think it over," temporized Garr.

Bexlann laid a tentacle on Garr's shoulder.

"Trry it, one time," he pleaded. "I ssay, I will pay you. Two thousand value-unitss—"*

"Whew!" whistled Garr. "That's a fat bribe, Bexlann."

The Martian said no more, and they all went out to eat.

Garr's thoughts, denied to his Martian comrades, were a churning race of apprehensive wonder. Was Bexlann serious in offering such a price for the chance to pry into the head of a simple cadet? If so, why?

What had Rakkam said? "Scorn and distrust of Terrestrial method among Martians—a plan, I think, to discredit our school—make us lose prestige—"

He ate quickly and excused himself. Seeking the library's back reaches, he let himself into the private elevator and soared upward to make his report.

A few steps brought him to the turn in the hidden passage, beyond which was the superintendent's office. Before Garr had stepped around it, voices came to his ears. Instinctively he paused. Then he recognized the speakers.

"Nola," General Rakkam was saying, "it's a trifle beyond regulation for an officer to show any service preference to his own relatives, but I feel that I must congratulate you."

"I have two loyalties, father," came the reply of Nola Rakkam. "West Point, and you."

"You aren't carried away by this cadet, Garr Devlin?"

Despite himself, Garr jumped. His mouth was dry, his heart racing. He strained his ears to hear what she said.

"He's interesting. Brilliant. A good piece of material from which to build a fine officer." That was all that Nola Rakkam had to tell her father about him.

RAKKAM chuckled. "You're a good chip off the seasoned old block. You've done splendidly in frazzling the defiance out of young

* Earth currency which would buy its equivalent in goods or services. One value-unit would be worth approximately $2.50 in American currency of 1940.—Ed.

Devlin. Keep it up, my dear, and both you and he will gain by it. Good night."

A door closed. Evidently the general had retired to his office. A moment later Nola Rakkam had come around the corner, and then halted with wide eyes.

"Garr," she began.

"Yes, Garr," he flung back, and bared his teeth in a very ugly smile. "I just happened to hear, Auxiliary Cadet Rakkam. Most clever of you and your father — very soldierly in him, very ladylike in you."

"You mean—"

"I mean, your encouraging me to forget rebellion and work tamely and well. I know now. I want nothing more of it, or you, or West Point!"

CHAPTER VI

The Martian Mind

NOLA RAKKAM'S gray eyes flickered—the first time Garr Devlin had ever known them to do so. But when she spoke again, her voice was steady.

"Perhaps you have reason to feel like this, but it's not quite the truth," she said.

"I daresay not. It's probably worse than that."

"I truly wanted to help—"

"Of course, of course. Simple psychology. A cadet is sulky. Put a pretty, pleasant girl next to him, and he brightens up."

"I say again, that isn't all the case. I wanted to help you as well as West Point."

"Thanks," Garr snarled with withering sarcasm. "I was to be tamed, then, whipped into the regimented ranks, and be thankful on top of it."

He started to go, and she caught up.

"Please listen. I saw you, noticed you, the first day you came. I told you once how I blundered in my first treatment. Everything I've done was to help, not to deceive or hinder. If I've been clumsy—"

Garr swung around so quickly that their faces were within inches of each other.

"Auxiliary Cadet Rakkam, I think that you and your father and West Point are a stench in the nostrils of honest people! Do you hear me? All right, why doesn't the sacred government lightning strike down this erring cadet?"

She drew herself up, her face darkening with an angry flush.

"I felt guilty at first, Cadet Devlin, but now—you're so childish, so narrow—"

He caught her by the shoulders and kissed her savagely. She neither yielded nor drew away. She only waited until he let her go, then she wiped her mouth with the back of her hand.

"I was badly mistaken in you," she said coldly. "You are not fit to associate with us here."

"Think what you like," Garr raged. "I'm through with you and West Point and all you stand for. Just now I wanted to help, tell something about the Martians, but—"

"What's that?" Nola demanded at once, seemingly forgetting all else. "What are the Martians here trying to do?"

Now it was his turn to be disdainful.

"You can forget even insults, can't you, if some worry presents itself about this precious school? But never mind. I tell nothing about the Martians. I may be able to help them—if they can hurt you and yours, I'll be glad to help. Good-bye."

Garr went back to the elevator. As he entered it, he glanced around. Nola

Rakkam was staring after him, silent as a statue.

When he reached his room, it was almost time for lights out. Bexlann greeted him cordially, and held up the wired head-band significantly. Garr nodded neither assent nor refusal.

The lights went off at last, and Garr, still fully dressed, stretched out at length upon his cot. He heard creaking straps, the snick of buckles, the gentle clang of metal — Bexlann and Zaang were crawling out of the harness that shaped them by day. Silence at last.

Garr lay for some moments, then sat up noiselessly, rose and crossed to the table. His groping hands found the head-band, the attached batteries. *Bexlann had admitted that the apparatus worked both ways.*

FOR a moment Garr thought of waking Bexlann, and agreeing on the spot to the experiment. Let the Martians learn of the Intelligence course, the suspicions of General Rakkam, all the rest.

But he paused. Foremost in his mind just now was his battle-fierce memory of Nola Rakkam. He had insulted her, and in the end he had kissed her. Such things he would rather hide just now from a mind-reader, however friendly. Let the memory dim a little first.

And so he returned to his bed, stealthily slipping the apparatus upon his brow and clamping it in place so that he could "listen" to the Martians.

He had a sensation of tingling inside his skull. He waited a moment, getting accustomed to it. Then he lay back, fixing his mind upon Bexlann across the room.

A picture rose in his mind. Garr closed his eyes and it became clearer, as if reflected against the inner surface of his lids—a red, red plain, with strange moss-green towers on the horizon. It was some vague visualization of a Martian landscape—Bexlann was thinking of home. He was thinking other things, too. Garr sensed articulate word-thoughts, as though they were spoken in some inner ear.

"I make progress," someone seemed to say, in Bexlann's metallic voice but without his defects of pronunciation. "We will be ready to take action here, as soon as you send a force. We can even seize West Point, probably without their thinking of resistance until too late."

Garr Devlin scowled in the dark. It was as though Bexlann addressed someone—and, even as Garr took that view of it, a message came as from a distance away.

"You have reported some important findings, but what of the secret you have mentioned, a deep and vital one? We here at headquarters grow impatient to learn it."

Garr listened with all his mental ears. It was as though he had tapped a private telephone line. By special training or aptitude, Bexlann was able to communicate with someone at a distance, and it so happened that the someone was discussing the very thing at which Rakkam had hinted — secret Martian enmity for things Terrestrial.

Was there truly a plan to cause trouble at the school? And might not the secret inquired about be the Intelligence course?

Bexlann was continuing: "I have told you of the Terrestrial cadet, Devlin, who lives with us, and my hopes of enlisting him in our cause."

Garr rose on his elbow. What were they saying about him?

"He is slighted by his own kind, and seems to be sympathetic to us. But he and other cadets are gone for hours daily."

Thus Bexlann; and the other thought-message replied:

"Martians are being deliberately excluded. They suspect us. They must not. If someone found out—"

"It must not be," Bexlann made mental reply. "On The Day, our group will strike, here as on Mars. I recognize how Earth must be treated—Terrestrials are jealous of good Martian relations. But—"

It was coming clear to Garr Devlin. He had heard hints of this in the Underways. Once Mars had dreamed of dominating the whole habitable system. A military caste had ruled its own planet, and tried to conquer others. The war of 2775 had put an end to that, and then came an era of close Martio-Terrestrial cooperation. But there must still be adherents of the old imperialist movement. What more natural than that young cadets would belong to it?

"Wait!" It was as though Bexlann's mind had shouted to his mental communicant. "Somebody probes our thoughts! And I know who it is—the man of whom I spoke—"

There was a swishing scurry of pliant tentacles in the dark. A heavy softness plumped upon Garr Devlin's cot, and great coils suddenly whipped about his throat and tightened there.

CHAPTER VII

Flight

GARR'S first effort to tear loose was unsuccessful — out of his armor, Bexlann could use six tentacles instead of four. All of them were as pliant and strong as lassos, all swift and deadly as snakes. The loop around Garr's throat tightened, another spanned his waist, a third warded off his right arm as he lifted it to strike. Other tentacles stiffened their tips, as sharp and tough as thorns. In the darkness these jabbed at Garr's eyes.

But the man attached was no common Terrestrial youth. Garr Devlin was born and bred in a grim community, and made strong and adroit by special training and nourishment. The cavern-dwellers of the Underways knew many rough-and-tumble tricks, grips, holds and blows. Garr Devlin was a past master at these, and once already in his brief life he had killed his man.

Wherefore, with his right arm pinioned, he hugged Bexlann's soft body to him with his left. As a tentacle groped across his face, he bit it fiercely and made it jerk hurriedly away. He brought up both knees violently, bruising the blubbery softness of his enemy.

Bexlann whined like a defective motor, but fought on. Garr was having trouble breathing, and he could not break the encircling coils around him. With a mighty effort, he threw himself sideward, so that Bexlann whirled from above him and off the bed.

Garr followed, rolling on top. His weight knocked the breath out of Bexlann, and Garr kicked free of the slackening tentacles.

"I'll tear you to pieces!" he promised with his first lungful of air.

By the thought-reader, which he still wore, he knew that Zaang had now come awake.

"Danger, Bexlann?" Zaang was asking quickly.

"Danger—the Terrestrial is a spy—"

Garr, groping on the wall, found the light-switch and turned it on.

The first flash of the radium-bulbs showed him the two Martians, abhorrently polypoid without their armor, creeping across the floor on either flank of him, like stealthy big crabs. He snarled:

"I'm hard to kill. Come on, both of you!"

Then, as they closed in, Garr made a motion as if to meet Bexlann's approach, and Bexlann wavered. At the same time, Garr sprang quickly but knowingly sideward. One heel drove into the center of Zaang's body, the other spurned his flowerlike skull.

There was a squeaky yelp, like the voice of a stricken bat; and Zaang went even squashier than usual. His tentacles fell slack. Garr drew beyond him, so that the silent form lay between Bexlann and himself.

Bexlann was retreating now. "You have killed Zaang," he gurgled.

"I know it," said Garr. "I'll kill you, too, if you don't—"

"Sso you lied," yammered Bexlann. "You arre loyal to Wesst Point, not a rrebel. You prry into ourr campaignss—"

Garr had not stopped to think about that. His only wish had been to avenge the attack upon him.

"But I sshall d e s s t r r o y you," promised Bexlann. "By the handss of yourr own kind." Suddenly Bexlann began to yell. "Guarrd! Guarrd! Thiss way—Murrderr!"

His steely voice would penetrate to outer corridors and bring sentries on the hop. In a trice, Garr knew what would be the result — himself seized, with the corpse of a Martian cadet and a plausible lie by Bexlann to convict him.

What he had told Nola about his disillusionment and disgust would make for explanation of a motive. Nothing he could say would help him. Bexlann read his thoughts, and exulted.

"You arre alrready doomed, Devlin —dissgrraced and sslain—"

Somebody was hurrying along the corridor outside. Garr, on sudden desperate impulse, tore open the door and, meeting the oncoming sentry halfway, smashed him in the face with a hard right fist.

Down went the man in a heap, and Garr hurdled him and dashed away..

THE cubicles along this side-corridor were all occupied by Martians, and every door had flown open with flowery heads looking out. The thought-currents, or the commotion, or both, had wakened them and brought them to investigate.

Garr raced down past a succession of rasping challenges and realized, too late, that the end of the passage was closed up. Behind him were more Terrestrial voices and feet, loud in pursuit. He sprang through a door into the last cubicle to his right.

A solitary Martian, in his harness and standing erect, confronted him. Still wearing Bexlann's mechanism around his temples, Garr could read the creature's frantic thoughts:

"Does this spy hunt for the way to the shot-tunnel. . . ."*

It sounded like a hint, at escape, for Garr. He leaped at the Martian, clutching at the base of the cranium. His fingers found the soft neck, and dug in.

"Where's that shot-tunnel?" he demanded roughly.

The Martian flailed at him with furious tentacles. They fell like whiplashes upon Garr's face, making him release his hold. The noise greatened in the passage just outside, and Garr turned to slam and fasten the door. The Martian had fallen back to an opposite corner, as though to defend

* A shot-tunnel was a means of underground rocket transportation, much used on Earth in the thirtieth century. A round passage carried a car that fitted it like a bullet in a gun barrel. Rocket explosions at the rear of the car propelled it, and on a straightaway its speed might approach that of rockets in space.—Ed.

something there. Purposefully Garr rushed him.

He tripped the unsteady creature, pinned him down and poised a fist in air.

"Where is it?" he demanded again.

"I will neverr tell," gasped the Martian, and Garr smote him at the point where Terrestrials have faces.

The soft body subsided—the Martian was stunned, if not badly injured.

Fists thundered on the door. Garr sprang to the corner from which his adversary had tried to hold him. He saw no sign of a panel or door, but low toward the floor showed a little metal stud, like a light-switch. Garr pressed it, and a section of the wall slid smoothly away. He stepped through at once, and the wall closed itself behind him.

He now stood in a chamber, dimly lighted by the dun flare of a small radium bulb in the ceiling. Ahead was a round opening, filled with blackness and not more than thirty inches in diameter. Across the concrete floor ran a single shining rail, which disappeared at its far end into this black hole. Along the rail, within the chamber, were balanced several cylindrical rocket-cars, each big enough to hold one man, lying at full length.

Garr gazed around, rationalizing this place and its use with the disturbing fragments of information he had gleaned in the past few minutes. The cadets from Mars were part of a movement to bring about confusion, war and overthrow of governments.

The suspicion that they meant to discredit West Point and the military policies thereby represented did not go far enough: West Point would be seized, rather, and used as a deploying point for a force attacking Earth.

All this, as Garr had heard, would happen at the same time that the imperialist party would strike to overthrow the government of the present Martian ruler. And then? War, on Earth and Mars alike.

There must be many Martians here on Earth, organized and armed, poised to strike. The hidden chamber Garr had found was the head of a shot-tunnel, communicating with a headquarters of the overthrow plot. It must have been managed with consummate stealth and industry, and through it could journey many Martians, armed for war and sabotage.

Seizure of West Point would start rolling a storm of disaster.

Meanwhile, the cubicle from which Garr had come had filled with voices, plainly audible through the panel. Terrestrial officers and sentries were searching for him. Martians, too, were speaking.

"It wass Garrr Devlin," said someone Garr felt sure was Bexlann. "I know that he wass in thiss end of the corridorr, but I am alsso ssurre that he rran passt my own doorr, into the open."

"After him, then," commanded an officer, and there was a trampling exit.

BEXLANN had lied, and plainly to protect Garr. But why? A moment later the Martians were left alone in the cubicle beyond the hidden panel. Adjusting his headgear, Garr could catch their mental communications:

"Quick, into the head chamber of the shot-tunnel. . . ."

"He must be there. What shall we do with him? . . ."

"Capture him. . . ."

They were coming in after him.

Garr hoisted the lid of the car closest to the tunnel. He flung himself in. Controls were within reach of his hands, and he touched the lever that put the mechanism in motion.

With a grumble and a roar, the little

car leaped away along its single track. Garr felt vibration that almost sickened him; he was going at a terrific clip. Before his nose was a small dark rectangle like a television screen, and upon it a long, straight line, like a silver wire against the dark ground.

Along that line, from one end, moved visibly a little speck of red light. The progress of the speck showed Garr's own shifting position in the straight barrel-like tunnel. It was plainly a long track—many miles of it, and going south. What would he find at the other end?

Then he thought no more of that, for behind the red spark that represented his own advancing position now appeared a blue one. He was being followed by another car.

"Those Martians mean business," Garr said aloud in the humming interior.

He felt for the accelerator lever, and increased his already high speed. The blue spark moved not quite as swiftly, then began to gain.

What if the pursuer caught up with him in mid-tunnel?

Cars of this sort generally had high-frequency blasting rays at their noses, to clear possible obstacles in case of a tunnel cave-in or other emergency. Such a ray would make his vehicle red-hot, would roast him like a helpless turtle in its shell.

The thought was not pleasant to Garr, and again he manipulated the accelerator. He was going full speed by now.

The red speck that marked his own position was approaching the far end of the silver line—in a very few minutes he had sped many miles. Whatever the end of the journey would be, he was coming to it.

Computing that he had distanced his follower to a fair extent, Garr dared reduce speed, slightly and gradually. He was almost at the far head of the tunnel, and some sort of automatic brakes were coming into play. The vibration of the speeding vehicle became a strong tremor, and he stopped with a jolt.

At once Garr flung up the lid and sprang out, into a head chamber almost exactly like the one he had left at West Point. Then he reached into the car, *reversing* the levers and setting the accelerator for full speed!

He had barely time to slam down the lid before the thing whisked back into the tunnel.

Garr smiled, without mirth. The oncoming Martian—he hoped it was Bexlann—would have to work fast to set his blast-ray, destroy the car and avoid a fatal collision.

Now he faced toward the exit door. No way of knowing what was there without taking a chance. Crossing the floor, Garr flung the door open.

He saw dirt-walled passages, green lights, smelled musty odors and felt dank, chill air. He was in the Underways again, in the home caverns of his youth. The secret shot-tunnel, extending southward from West Point, had its terminus in the underground slums of New York.

Garr almost thrilled to the realization. He stepped across the threshold. His eyes, swiftly accustoming themselves to the dimness, probed here and there to see if there was anything familiar in the scene.

Then a voice spoke—mocking, metallic, Martian.

"You arre the sspy who hass caussed sso much trrouble. Rraisse yourr handss, orr we sshoot."

Figures stirred in the darkest shadows. No less than three Martians, armed with electro-automatic pistols, were covering Garr Devlin.

CHAPTER VIII

Garr Rejects An Offer

ONE Martian stepped close, leveling a pistol within inches of Garr's heart. The other two came up at either side, their tentacles skimming deftly through his pockets. They pulled the mind-reader from his head, took from him the claspknife that was the nearest thing he had to a weapon, and made sure that he had nothing else that might help him to fight or fly. Then he was bidden to stand easy.

"We might well sstarrt by killing you," announced the biggest of the three. "Earrth iss rripe to fall into ourr grrassp, and you will not be allowed to sslow the action."

But there was commotion from the doorway whence Garr had come. A Martian hurried into view, and Garr recognized him as Bexlann. Evidently the back-tracked vehicle in which Garr had fled had not wrecked the pursuing car, indeed had hindered it but slightly.

Bexlann was making gestures, and apparently hurling a thought-message. Garr, without the head-mechanism, was unable to read this, but was relieved to see his three captors relax their menacing attitudes a trifle. Then Bexlann addressed him vocally.

"I owe you something of an apology, Devlin. Ssince yourr esscape frrom Wesst Point, I have learrned that my ssusspicionss werre wrrong—that in fact you ssought to join ourr movement."

"How did you learn that?" demanded Garr, amazed. After all, he *had* just about decided not to be taken in by the friendly overtures of General Rakkam.

"Frrom the mindss of the Terrresstrrial officerrs—Rrakkam and otherrss—who looked forr you. Yourr taking of the mind-rreaderr musst have been merre coinccidencce."

"That is right," said Garr truthfully. "When you jumped me, I defended myself. That started the whole violent flurry."

"Come, then. Therre iss much to be talked overr."

The four Martians escorted Garr to another door, well plastered with clay and almost invisible against the wall. It was opened from within by a sentry with a rifle, and Garr was ushered in by Bexlann.

A Martian sat at a desk in a plain officelike compartment, with white enameled walls. He was smaller than most of his race that Garr had seen, and over his harness he wore a loose robe of turkey-red with gold embroidery of rank.

There was no slightest feature on his chrysanthemum visage to judge him by, yet Garr was aware that here sat one in authority, a chief of the conspirators. Bexlann, standing respectfully before the desk, apparently made his report. The seated chief addressed Garr.

"Few worrdss arre besst. If it iss trrue that you arre no sspy, but a trrue rrebel against the abusses of Earrth'ss goverrnment, I can offerr you both life and rrevenge."

Garr strove to temporize. There were things in his own heart that he must have the chance to set straight.

"Will you please tell me a little of what's happening around me?" he asked. "All I know is that this is a corridor of the Underways."

The chief gestured the three Martian guards out. Only Bexlann and the sentry remained, ranging themselves behind Garr.

"Yess," said the chief. "A parrt of the Underrwayss, long forrgotten. We have had headquarrterrss herre, and elssewhere in thiss caverrn ssysstem, for many yearrss. Now, as you sseem to

know, we arre about to come into ourr own. We have alwayss felt frriendly towarrd the Underrwayss. You poorr underrlighted folk will fight forr uss beforre many morre hourrss."

"You're sure of that?" prompted Garr, and the big head nodded.

"We have gained control, by prromissess of frriendsship and help, of all the leaderrss. At theirr worrd, the light plants, waterworks, heat plants will sstop. New York will fall parralyzzed. We will capturre thiss grreat city, and frrom it strrike otherrss—sseize officials, make terrmss—"

IT could indeed be as simple as that, Garr saw. The things that kept civilization moving, here under New York, were in the hands of wretched, despairing workers. Those workers looked to certain natural leaders among themselves. If the leaders obeyed the uprising Martians, New York could be deprived of power, light, transportation, communication by a simple cessation of mechanical labor. And Garr suddenly was sure that he did not like it.

"What do you offer me personally?" he asked.

A tentacle gestured largely.

"You arre mosst unussual among yourr fellowss. Yourr rrecent actionss and viewpointss sstamp you as a potential leaderr. When the worrkerrss of the Underrwayss turrn frrom theirr sshopss to take up the arrmss we give them, they will fight betterr underr a commanderr of theirr own kind."

Bexlann nudged Garr from behind.

"You felt the need forr ssatissfaction frrom thosse who have missussed you," he reminded, "but you neverr hoped forr a chance like thiss. At the head of an arrmed rrebellion—"

"I see," interposed Garr. "It would make your own stroke successful. While we Underways people overcame disorganized resistance here, you Martians could concentrate on, say, overwhelming other communities."

"That iss rright," agreed the chief. "We would be frree to dassh to Ssaint Louiss,* and capture the prresident of the World League. With him in ourr posssesssion, we could prrobably make ourr own terrms."

"And meanwhile," pursued Garr coldly, "I and the others of these Underways would be spilling our blood for your benefit."

A confused chatter of protest shrilled from both the chief and Bexlann.

"You do not underrsstand, Devlin. We give you opporrtunity to strrike yourr enemiess, the people of the Upperr Town—"

"They're human, like me!" snapped Garr.

And suddenly he gasped at the implication of what he had said.

"No," Garr Devlin told himself tensely. "I'm not going to stab my own kind in the back, no matter what the provocation. This is a matter between the Underways and the Upper Town. If I start now to employ treacherous, underhanded methods, I'll move in an atmosphere of conspiracy the rest of my life. I'm a man—not a termite."

Aloud: " 'Few words are best'," he quoted the Martian chief. "I hated West Point—but my hate was my own idea, and the quarrel was between me and people of my own kind. I had a grievance to settle, yes. But I did not ask the help of you freaks, who aren't human or even Terrestrial. If I settle any accounts, I'll do it on my own hook —not at the command of Martians, for an outlaw Martian purpose."

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* At the time of this story, St. Louis in America had for a number of centuries been the center and Capital of the World League of Terrestrial Governments.—Ed.

"You arre a fool," snapped Bexlann.

"I am a Terrestrial. A rebel, but not a traitor. I won't drink the blood of my own kind, for you or for any other schemer from a foreign planet."

He drew himself up sternly, and the Martian sentinel immediately leveled his rifle. Bexlann and the official behind the desk came close together, apparently conferring. Then Bexlann offered a new argument.

"You cannot believe that you can brridge the hosstile gap between yourr own kind and the upperr classsess of Earrth."

Garr had assured himself of the answer to that, and now he gave it:

"I recognize the difference, but it's man-made, and between me and others of my own race. The difference between man and Martian is wider—as wide as interstellar space. I stick by the people of my own stock. You and all your schemes can go hang!"

Bexlann nodded mournfully, as if in unwilling acceptance.

"Then," he said, "it but rremainss to punissh you forr murrderr of my comrade, Zaang. Follow me."

THEY went through an inner door of the office. Here was a small room, or rather hole, unlighted and musty. Its walls and floor were of hardened clay, and there was no furniture. By the light of a flaring radium torch, Bexlann motioned Garr into a corner. While the sentry stood guard, Bexlann fitted a metal shackle snugly about Garr's ankles.

"We will make judgment in yourr casse, and rreturrn," announced Bexlann and left, shutting the door behind him. Garr remained alone in darkness.

He set his back in the corner and groped around his feet, investigating his shackle. It was in two hinged pieces, massive and furnished with a long, pliant cable. He felt along that cable, and judged that it was about five feet long.

The far end was looped around a heavy staple, which jutted from a flat-faced stone in the clay wall. Garr's fingertips returned to the band around his ankles. He located the lock-aperture, and found that it was sizeable for so small a device.

It reminded him, in fact, of the opening in the lock of the double door he had forced open to visit Nola Rakkam—how long ago? Perhaps this was a simpler variation of the same principle, with only light rays able to open the lock. Bexlann had used no key. There was no snick of springs in the shackle as it closed. And he, Garr Devlin, was being left in the dark, alone. Perhaps forever.

Might not these Martians be planning to forget him? They were close to their day of reckoning, when their agents in key positions, leading human subordinates to cripple Earth's enterprises and capture Earth's leaders, would strike to master a planet. Battle would follow, prolonged and bloody. And all the while he, Garr Devlin, might well lie hidden here, a chained corpse, dead and forgotten by everyone.

It was a panic-feeding thought, and he put it from him. Again he fiddled with the locked band, the cable, the staple. His fingers traced the outline of the stone to which he was bound.

It was a full twelve inches square on its exposed surface. Garr picked at the edges with his fingernails. Dry flakes of clay came loose. Might the lump be dislodged? If he had some tool—anything hard and pointed—

With a gleam of hope he remembered the buckle of his waist-belt. Unfastening the leather strap, he straightened the stout buckle tongue and began to dig around the edge of the stone.

The clay came away, bit by bit. A strong pull on the cable made the stone quiver. Garr pondered that the shackle was probably designed for the confinement of Martians, much weaker physically than Terrestrials, and that he was of more than common strength for a human being. Alternately he dug and heaved. In his eagerness, he made considerable scuffling noise, and realized it too late.

The door opened suddenly, and a Martian figure appeared in it. Then the door closed again, and the creature shuffled toward him.

"Ssit quiet, orr I sshoot," said a new voice—the voice, Garr judged, of the sentry at the outer entrance. "What iss thiss commotion you make?"

"I'm only uncomfortable," replied Garr.

The figure came nearer, confident in the gloom. Martians could move in the blackest of night by virtue of their awareness-sense; and this one, forgetting that Garr was of the Underways, thought him blinded. The sentry stooped above the half-loosened stone.

"You arre lying," said the sentry. "You have trried to esscape."

There was a slight *clink*—the automatic rifle was being laid down. Tentacles were investigating the stone.

Garr had been sitting with his pinioned feet drawn up. Locating the stooped bulk of the sentry in the near darkness, he lashed those feet out. They struck the harnessed body, bowling it over. Another kick drove in the frail skull.

IN an instant Garr had caught up the rifle. With the metal stock he dug deeply between the clay and the stone. He pried mightily, and the stone came out, like a tooth from a giant's jaw. It weighed forty or fifty pounds, and Garr hoisted it under one arm. His other hand took up the rifle. Rising unsteadily, he hopped across the dirt floor.

Cautiously he tested the door. It was fastened from without. Poising himself, Garr hurled the stone at the center of the panel.

It broke with a great splintering crash. Like a grim kangaroo, Garr sprang out. Only the Martian chief was in the outer office, bending above his desk. Garr at once leveled his rifle—and fired!

CHAPTER IX

The Eve of Uprising

THE little Martian died without knowing what had struck him. Using the rifle butt as a support, Garr Devlin hopped and lumbered close to the desk, tumbled the corpse out of its seat, and dropped there himself.

His clamped feet he hoisted to the desk-top, making sure that the rays of the radium bulb in the ceiling struck the lock-opening. His inspiration had been right—the lock yielded after a moment and Garr stood up free.

At once he went to the outer door, rifle in hand. With the muzzle he pushed the panel cautiously outward, peering through. He saw no motion, heard no sound. After a moment he stepped forth into the tunnel-way.

On either side of the door lay a body —Martians.

Garr refrained with difficulty from exclaiming aloud. He knelt and examined one, then the other. The Martians were two of those who had captured him shortly before. Their heads were pierced, evidently by the scorching pellets of an electro-automatic pistol. What this meant Garr could not say, and he had no time to meditate upon the mystery.

Garr Devlin had declared for the

cause of Earth's government against a coup by Martians. He had learned that his chosen enemies were operating in this very cavern. Rifle ready, he strode away toward the further dim vistas of the Underways.

He had not far to go alone. He approached a side-corridor, when out of it drifted the mechanical voice of a Martian:

"At dawn, then, you arre prreparred to act."

At once Garr stole forward to peep in. The side-corridor was lighted, and the Martian he had heard speaking was standing among several Underways humans.

"Yah, Boss," grunted one of the latter. "We can fix the shop so nobody can ever get it running again."

"Not quite sso drrasstic as that," warned the Martian. "Ceasse worrk, yess—crripple the Upperr Town, yess —but rrememberr that we will need the engines to rrun ssmoothly when thiss iss all overr."

"Yah, boss," assented the man who had spoken.

Dawn would see the beginning of the movement to seize Earth. Say five o'clock. Garr, lurking in the shadows, glanced at his wrist-watch. It was past eleven—for two hours he had been fighting, fleeing, struggling, escaping. Six hours remained for him to do what he could in the conflict he had taken up.

He shrank back as far as possible, while the Underways men filed out and moved away up the tunnel. The Martian "boss" loitered behind for some moments. Garr set himself to strike as the flowery head appeared. But someone else had a different idea.

Even as the Martian came to the mouth of the side-corridor, a sudden sharp *sputt* sounded in the green-dim air. There was a gulp and a floundering down—the Martian was hit. And, a little way up the tunnel, a figure broke into a run in the same direction as the departing men, speeding so fast that Garr could not follow him with his eyes.

He bent to look at the stricken Martian. A pistol pellet had burned its way through the center of the creature's brain.

Good shooting—or was it bad shooting? Had an agent of the conspirators fired at him, Garr, and missed? But other Martians had been killed, just outside the head of the shot-tunnel. Perhaps Garr had a friend, a potential ally, very near him.

Before moving on, he threw off his blouse and tore the shirt beneath it to rags. As quickly as possible, he made himself shabby, and drooped his shoulders into an Underways slouch. He could not be conspicuous if he hoped to survive long. With that realization in mind, he moved up the tunnel until he came to a cross-ways.

HERE it was brilliantly lighted, and a number of Terrestrials, armed and vigilant, were stationed there. One halted him.

"Are you of the right party?"

Garr judged that the fellow meant the party of the conspiracy.

"What else would I be of?" he flung back. "And I'm in a hurry, too. Let me by."

"Only officers allowed at that meeting."

"I'm an officer," replied Garr, who had no idea what the meeting was, and wanted to find out.

"Let him pass," said another of the men. "He's all right, or he wouldn't be down in that end of the corridor."

Garr passed through the group, and fell in with a knot of others who walked beyond the cross-ways. They paid him little attention, but talked animatedly among themselves.

"Well, here's what we been waiting for."

"Upper Town'll never know what's up until we've got 'em."

"Trust Martians to bring it off."

And so on. Garr remembered how he, in his boyhood, had heard the casual remarks, almost like bywords, of how certain folk of Mars sympathized with the Underways, would help them and make them great. He understood now that he had been only on the fringe of the plot, which must have been years in forming and had involved many close-mouthed, desperate neighbors of his.

"How far to the meeting?" Garr asked the nearest of his companions.

"A mile—it's in the big hollow," was the reply, and Garr quickened his pace, leaving the others behind.

Up ahead a glow was greatening, as of a torch-lit cave. Garr came close enough to see that it was just that—a big hive-shaped cavity, scooped out at the crossing of several corridors, and filled with people. The lights glittered on weapons and tools of many kinds. There was little noise of conversation, and almost no movement. From afar the crowd seemed drawn up into disciplined ranks.

As Garr approached, he saw that sentries made a cordon across the way, and slipped down a side-corridor to find another path. It, too, was guarded not far from him. Again he negotiated a side-path, and found the narrowest of holes, barely wider than a man's body. Along this he slipped, his eyes on the brightness ahead.

"Halt," said a Martian voice, and a single guard blocked his way. A tentacle poised a pistol.

"Who arre you, and what arre you doing here? Only the speakerrs enterr frrom thiss dirrection."

That was interesting information.

"I've come here to take your place," replied Garr plausibly.

"Only Marrtianss arre trrussted herre, in thiss posst of sspecial imporrtance," was the answer. "I wass told that I musst keep guarrd alone until the meeting wass overr."

Garr felt even better on hearing that. He smiled sweetly, so sweetly that momentarily the Martian relaxed. Then Garr hurled his rifle, butt foremost, hard and straight as a javelin. It felled the guard, and a trampling rush and spurning kick finished him. Garr picked up both his own rifle and the fallen pistol of the conquered one.

"That's my fourth Martian in less than three hours," he computed. "Or did I get five? . . . I'm losing count. Anyway, I have a clear entry to what's going on, and a clear way to escape."

He advanced, as noiselessly as possible. At the far end of the narrow way was an ancient metal door, with a grating. He peered through.

RANK upon rank of Underways folk filled the cave, mostly young and middle-aged men, though here and there were women with strange, tense faces. Most of them, Garr judged, were petty executives in the shops and works—foremen, machinists' mates, straw bosses.

They stood like soldiers at ease, in little squads and groups. Shabby as their clothes were, yet bright and modern were the rifles, ray-throwers and other weapons they bore. Without being told, Garr knew that he was gazing upon the cream of the faction that had been brought under sway of the Earth-coveting Martians.

Just beyond the door was a raised platform, of boards set upon heaped-up earth. A man, big and impressive, was speaking. Though he dressed in Underways manner, his physique and voice

suggested the Upper Town. Evidently the conspirators drew their Terrestrial allies from all classes.

"I say again, we can't and won't lose," he was concluding. "Most of you have dreamed of this moment all your lives, and in some cases your fathers and grandfathers before you. So far as the Underways go, they're set to win.

"And now you want to hear from some other link of the chain—and I've brought someone who's been preparing for the blow-off at West Point, the heart of the military power we must knock off balance at dawn tomorrow. I introduce Captain Bexlann of Mars."

Everybody smiled in welcome, nobody cheered—it was that kind of meeting. Garr remembered that certain lesser folk had been excluded, that he had been allowed to approach only on supposition that he was a leader.

Bexlann came into range of his vision from the side of the platform.

"I am as happy as you arre that the day comess," he began. "I have worrked harrd, not verry pleasantly—allowing mysself to be orrderred about by the gilded foolss who call themsellvess officerrss and insstructorrss. But that iss at an end—with thiss night.

"My comradess at the Point will move, at worrd frrom thiss end, to sseize Generral Rrakkam and hiss sstaff. Otherss will explode the arrssenal, sshoot down any who rressisst, and take posssesssion of valuable militarry ssecrretss in the arrchivess.

"When that happenss, naturally therre will be movement of forrcess to rrecapturre ourr holdingss. But we will have the advantage of ssurrprrisse; and if we have taken New Yorrk, Wesst Point and the capital at Ssaint Louiss, the battle iss half won. The ssame thing will be happening on my own planet."

His rapt auditors were actually ready to cheer him. Garr set his teeth.

"Once morre I urrge you," Bexlann continued. "Let nothing sstand in the way of ssuccesss. I know that many of yourr neighborrs have not joined the movement—do not know of it. When you have sstruck, they musst join or die. Any wavering will be punisshed.

"Look out forr sspiess—we have dealt with one not many momentss ago. And if the folk of the Underrwayss do not underrstand that thiss iss theirr opporrtunity to gain frreedom, ssunlight and plenty, let them be wiped out!"

IT came to Garr that Bexlann had lived too long. He lifted the rifle he had captured and drew a bead on the back of Bexlann's tunic.

"Now," he muttered to himself.

But then a hard, round muzzle of metal thrust itself between his own shoulders. Even as Garr Devlin covered Bexlann, so someone covered him.

"No time to argue," said a soft, low voice. "Put down that gun at once."

It was the voice of Nola Rakkam.

(To be concluded)

What will be the outcome of the great Martian-inspired revolt? Will Nola Rakkam kill Garr Devlin, thinking him no longer to be trusted? Will Nola herself be shot in turn? If Bexlann plays his cards right, can he not aspire to personal overlordship over all Earth, as a reward for a job well done?

Part II of Manly Wade Wellman's great serial, "West Point, 3000 A.D.," will appear in its concluding installment in the December issue of AMAZING STORIES. *This dramatic story of espionage and counter-espionage, with the destiny of the Earth itself at stake, will attain a climax so exciting and so surprising that "West Point, 3000 A.D." will undoubtedly go down in the annals of scientifiction as one of the greatest pseudo-science stories ever written.*

TREASURE TROVE
IN TIME

by David Wright O'Brien

What would you do if you had just one precious film that could photograph the future? Malcolm Mace had such a film...

MALCOLM MACE, President of Sidewalk Pix Company, ran a well-manicured hand along the fringes of his neatly cropped black mustache and nervously adjusted his tie. The sixth squawk of the morning, in the person of an irate old gentleman, stood before his desk.

"A pack of highway robbers," the old gentleman stormed, "that's what your company is! Tricking innocent citizens with your blasted confidence game. Candid pictures, indeed!

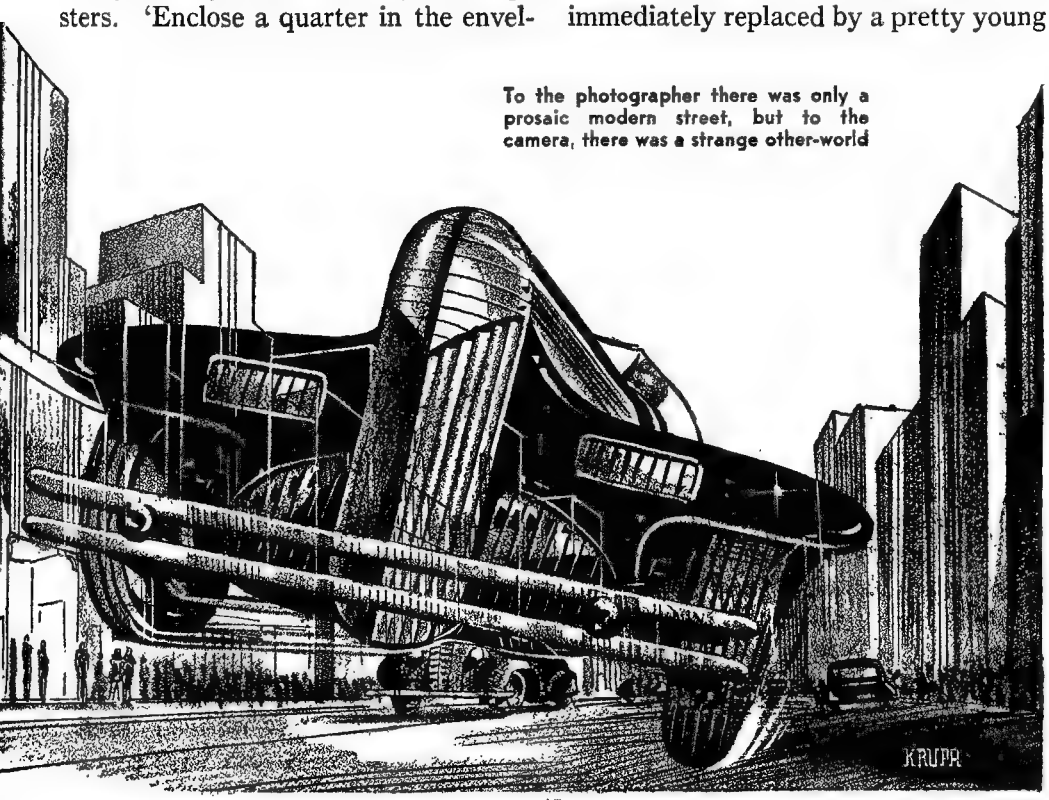
"I must have been an old fool to send in my twenty-five cents to you sharpsters. 'Enclose a quarter in the envelope given you by our sidewalk photographer and receive three candid photos taken unobserved by you,' the old gentleman mimicked.

"Three pictures of the sidewalk, that's what *I* got for my quarter! Not a sight of me in any of them!"

Mace fished into his pocket and slid a quarter across the desk.

"Okay," he nodded wearily.

The old gentleman pocketed the quarter with a gnarled paw, and muttering direly about such matters as the District Attorney, stamped out of the office. Stamped out of the office to be immediately replaced by a pretty young



To the photographer there was only a prosaic modern street, but to the camera, there was a strange other-world

blond thing who, from the look in her eyes, was to be the seventh squawk of the morning.

"I want my money back," said the blond young thing, getting directly to the point. "I sent in a quarter in an envelope given me by one of your sidewalk photographers. I was under the impression that your candid camera genius had snapped three shots of me when I was walking down the boulevard."

"And what kind," said Mace apprehensively, "what kind of snapshots were mailed to you in return?"

"These," said the young lady frigidly, hauling forth an envelope from her purse.

Mace picked the envelope from the desk and pulled out the snapshots. They were enough to make him shudder. Pictures of an old woman wearily teetering along the boulevard on a cane!

"Obviously," Mace looked at the trim young blond, "obviously these are not pictures of you." He fished into his pocket for the seventh time. "Here," he said, "is your quarter. There was some mistake. Our photographer must have given you the wrong envelope. Forgive us."

Grabbing the quarter, the blond young lady marched tight-lipped from the office, the seventh person likely to spread the rumor that the Sidewalk Pix Company was a gyp outfit.

Malcolm Mace peered out into the waiting room of his office, and sighed heavily as he saw that there were no more indignant citizens waiting there. Then, straightening his well-tailored shoulders once more, he walked back to his desk and pressed a buzzer.

A pretty, red-headed girl in a print dress appeared, arching her eyebrows inquisitively at him.

Ordinarily Mace would have favored his secretary with a leer. For he had worked himself into a definite state of mind over lovely Gail Lee. But other matters occupied his mind. Matters that made him set his rather weak jaw grimly, caused his eyes to blaze angrily.

"Gail," Mace snapped at his secretary, "tell that lumbering lunkhead, Mike Foy, to come into my office immediately!"

"Yes-yes, Mr. Mace," Gail Lee faltered, and Mace noted keenly that she paled ever so slightly.

A source of irritation to Malcolm Mace, these past weeks, had been the budding romance between his comely secretary and Mike Foy, his sidewalk photographer. Which, Mace thought with relish as he waited for Mike Foy to appear, was going to make firing the stupid ox doubly profitable. He would be saved asinine mistakes in the future, and would be able to make better progress with Gail himself.

MIKE FOY towered sheepishly in the doorway five minutes later. He was still wearing the gunnysack that served as an apron in his dark room, and his lank black hair hung disarranged over his forehead.

Mace wondered what in the hell Gail could see in a chump like that.

"Come on in, Foy," he said. "I've got a few bones to pick with you. I don't think you'll find them pleasant."

"What's the trouble, boss?" Foy entered, scratching his head. He wasn't any too quick on the uptake.

"The pictures you took two days ago, Foy," Mace said frostily. "What did you take them with, time exposure?"

"Y'mean when I was out on street work?"

"That's right," Mace continued sarcastically. "You catch on fast. What were you doing when you were taking those pictures—napping?"

"Naw, boss. Right on the job, I was. Honest. Took over four-dozen snaps." Foy seemed somewhat confused by it all.

"It might interest you to know that I've already had seven squawks on those pictures this morning," Mace said acidly. "It seems that you took two pictures of old men which, when sent to them, didn't reveal hide nor hair of said old men."

Foy opened his mouth to speak. Mace continued, ignoring him.

"You also took a snap of an old lady which, when sent to said old lady, showed the vacant reaches of an empty lot on Tenth Street."

"But boss—" Foy began.

"But nothing!" Mace cut back in irately. "You also took three pictures of pretty young damsels. Pretty young damsels who turned out to be in the vicinity of ninety years old, when the developed snaps were sent to said young cuties!"

Mike Foy scratched his head perplexedly. He shrugged his big shoulders lamely.

"All those people came into the office? You *saw* the snaps?"

"I'm not," said Malcolm Mace in righteous hypocrisy, "in the habit of lying, Foy!"

"I *know* that the envelopes didn't get mixed up. I watched the numbering of the negatives very carefully," Foy tried a last protest.

"In that case, Foy," Mace declared with acid relish, "you are merely an incompetent photographer. We have no room for incompetent photographers in Sidewalk Pix Company. Draw your pay, Foy. You're fired!"

With intense satisfaction Mace watched Mike Foy move numbly out of the office, automatically removing his gunny apron as he walked. It was a wonder, Mace told himself, that he hadn't thought of tying the can to Foy sooner, before Gail worked up any interest in the lug.

At any rate, everything would be fine now. He, Malcolm Mace, would be able to make a little time with Gail Lee. And she would never be able to suspect that her boss had fired Mike Foy for any other reasons than the fact that he messed up seven sidewalk snaps.

CHAPTER II

A Fabulous Fortune

AN hour later, however, Malcolm Mace was a little bit more than annoyed at the words spoken pleadingly to him by Gail Lee. His secretary was plainly distressed, had requested to speak to him alone in the privacy of his office.

"Please, Mr. Mace," Gail said, and Malcolm Mace stroked the fringes of his mustache to hide his irritation at the sign of tears in her eyes.

"Please, it's about Mike—Mike Foy."

"Yes?" Mace forced himself to make his voice understanding, sympathetic. "What about Mike, Gail?"

"I've heard you fired him."

Mace nodded, eyes drifting up and down the loveliness of Gail's figure. He nodded again.

"Yes, Gail, I was forced to. I didn't want to. But he botched things up so badly in his work two days ago that there wasn't anything I could do."

"Look, Mr. Mace," Gail went on. "Mike didn't tell you why those shots got botched up. He isn't the kind of man to whine. But I'll tell you why!"

Malcolm Mace tried to look interested.

"Go on," he invited.

"Sidewalk Pix Company has a policy which makes its photog men buy their

own plates," Gail said, and Mace reddened at the implication in her voice.

Cheapskates, that was the implication.

"And since some of the photographers don't make any too much money from salary," Gail went on, "it becomes a problem to pay for plates every so often."

"If you don't agree with our company policy, which has been established for very good reasons—" Mace began in an injured tone.

"I'm not saying anything about it," Gail broke in hurriedly, "except to remind you that it exists, and to show that it's the reason why Mike Foy botched those shots." She took a deep breath and continued.

"Mike was flat broke two days ago," Gail said, "when he was going out from the studio here to take his pictures. He only had five-dozen plates to work with. So when the cat—"

"The cat?" Mace exploded in irritation. "What has a cat got to do with Mike Foy? Really, Gail, get on with the actual details."

"The laboratory cat, Muffin, the gray one that the photogs keep around their dark rooms," Gail said quickly. "Muffin was prowling around in Mike's dark room, just as he was getting ready to leave.

"There was a terrible crash, and when Mike went into the dark room, he saw that the cat had knocked over all his developing chemicals. They had spilled over a dozen of Mike's plates—fresh ones he had laid out for the day's work."

"So?" Mace's voice was a sigh. This was getting monotonous.

"So poor Mike had a dozen plates soaked with all sorts of chemicals, and no money to buy a dozen extra ones."

"If he couldn't save money enough to meet equipment shortage, I don't see where—" Mace began irritably.

"But you must see!" Gail's voice was pleading. "He had to use those soaked plates. He wiped them off as best he could, hoping that he'd have enough good plates to get through the day with.

"But it turned out that he didn't. He had to use seven of the twelve soaked plates. Those were the seven botched shots, Mr. Mace. I'm sure of it!" Gail ended in a breathless plea.

"So reconsider, won't you? Poor Mike feels awful about losing his job."

"I am most sorry," said Mace sympathetically, "that the cat spilled the chemicals. I am equally sorry that the chemicals spilled on Foy's plates. I am also sorry that he was too broke to get fresh ones.

"But," and here Mace paused dramatically, softening his tone, "I don't see where there's anything I can do to remedy the situation. Foy has been discharged. And might I say, without meaning to pry into your personal affairs, Gail, that he isn't worth the time you waste on him?"

"You might not!" the red-headed secretary snapped, eyes gone slate-gray with rage. "My own business, Mr. Mace, is my own business. Even when it involves Mike Foy!"

MALCOLM MACE choked back the rage he felt as he watched Gail Lee march out of his office, auburn locks shining defiance. If she wasn't so damned lovely, and if he didn't have the ideas that he had, he would have been prompted to fire her then and there.

"But no," Mace murmured to himself a moment later. "That wouldn't boost my stock any. And from now-on-out, believe me, it's going to hit a rising market!"

Idly then he glanced through the

seven botched snapshot series, chuckling mentally at the circumstances of fate that had given him a reasonable excuse to fire Foy. Cat, indeed. The idea of a cat being responsible for this shot of an old lady—which really *wasn't* a shot of an old lady, but that of a billboard next to a vacant sidewalk—was more than laughable. It was a stupid excuse.

Malcolm Mace had been subconsciously staring at the snap, his mind automatically reading the billboard.

"Minton Circus," declared the billboard poster, "Coming Next Week—Sept. 25th."

Maybe, Mace thought in amusement, he could take Gail to the circus next week. Let's see. The 25th of September would be on— Mace suddenly stopped his mental musings. The 25th *wasn't* next week! The billboard was wrong, quite wrong. Why, this wasn't even September yet; *it was June, three months away from September!*

"Gosh," Mace muttered, "what a faux pas on the part of the billboard advertisers."

His eyes passed on to the shot which *should* have been that of the lovely blond thing, but showed a teetering old hag instead. Passed on, and stopped in stricken fascination. Mace had an eye for camera detail. He knew his lens. Consequently his sharp glance picked out even the most minute details. Details the ordinary eye wouldn't catch.

Such as the fact that the hag in the picture was passing a barber shop window.

Such as the fact that a calendar on the wall inside the shop could be read faintly.

Such as the fact that the calendar said "1980"!

Mace threw his hand before his eyes in a gesture of incredulity. No. It *couldn't* say that. Why, the thought was impossible! Must be something else. He seized a magnifier by his hand, put it to the snap. Yes, "1980"!

Mace peered at the picture in breathless fascination, for beneath the calendar, now that he could see microscopically, was the name of the calendar advertiser, "Martin Automobiles." Above the name was a picture of the automobile—*a sleek, incredibly strange-looking machine, utterly futuristic in design!*

"No," Mace muttered hoarsely to himself. "No. This is impossible! Utterly, fantastically impossible. It can't be!"

Desperately, he tried to drive away the utterly absurd premonition plucking insistently at the back of his brain. A cat, some spilled chemicals resulting in an unknown catalystic effect—

"No," Mace repeated, "it couldn't happen!"

But in the back of his mind he remembered countless scientific wonders that had been the result of accidental chemical compounds. Too, he was thinking of the young thing, the lovely blond who had indignantly protested against the picturization of herself as a hag. And yet, if the date had actually been 1980—*she would very probably be a withered-up old crone!*

Mace pushed the pictures aside and rose from his desk. Pacing up and down the room, he battled futilely against this growing conviction. The future existed. Certainly the future existed! So, *if the future existed, what was there to prevent it from being photographed with specially treated plates?*

BUT these plates hadn't been specially treated. They had been accidentally drenched with a confusion of chemicals. Yet chance, Mace had to admit, had led to many, many revelations in science.

Mace returned to the pictures. If all this were true, then it was quite logically possible that the old man wouldn't have seen himself in a picture in the future. For the old man would have been dead by then!

Mace shuddered. Every single scrap of evidence fit unerringly into one pattern. *Those accidentally doused plates possessed the properties to photograph the future!*

"Good God," Malcolm Mace muttered hoarsely. "Good God!"

Then an expression of mingled excitement, shock and greed crossed his features. There were a dozen of those accidentally drenched plates. And Mike Foy, the lumbering idiot, had used seven. That left five. Five snaps of the future!

"Oh, gosh," groaned Malcolm Mace, "and I've fired him!"

He reached for the buzzer on his desk, pressing it wildly. Then an expression of infinite cunning crept into his eyes, and he smiled.

"No one," he told himself softly, "has any idea of what those plates can do, of what they've already done. No one but me. Not even Mike Foy himself! And he's got the plates."

His hands trembled as he lighted a cigarette. He steadied them on the desk. Gail would be in the office in a moment, and he couldn't let her suspect that anything was out of the ordinary. But it was horribly difficult to control the emotion that flooded through him. The mere thought of the power that those plates would give him was staggering. Money and power beyond the reaches of imagination!

Gail stepped into the office, sober and unsmiling. Her eyes were redder than before.

"You wanted me, Mr. Mace?"

Malcolm Mace took a grip on himself, forced a calmness that he didn't feel. He smiled winningly.

"Gail, I've reconsidered Mike Foy's case. I'll take him back. Go downstairs and tell him I want to see him."

The expression in the eyes of Gail Lee was one of surprise and elation.

"Oh, Mr. Mace, that's swell of you, really! I'll tell Mike immed—" She stopped abruptly.

"What's wrong?" Mace said with a slight suggestion of a croak. "What's wrong?"

"Mike left the building about fifteen minutes ago. He took all his equipment with him," Gail gasped. "He didn't even bother to draw his pay. Said he'd be in to get it tomorrow."

"He took his equipment?" Mace bleated. "Everything? Plates and—and everything?"

Gail nodded dumbly. "But he'll be back tomorrow," she said with enthusiasm once more in her tone. "He'll be back tomorrow for his pay, and you can tell him that you'll keep him on then. Oh, he'll be so relieved, Mr. Mace! He felt so badly.

"He was going to use his last five plates, those practically useless ones, to take some shots which he hoped to sell to the rotogravure section in the Sunday paper."

"Rotogravure section? Sunday paper?" Mace was finding it hard not to scream, not to swoon.

"What," Mace managed to groan, "does he want to take rotogravure pictures for?"

"Why," Gail was logically cool, "he figured that since you fired him, since he was out of a job, he would have to free-lance that way until he landed another spot."

"Oh, Lord!" Mace rose with his hands to the side of his head. "Have you any idea of where he might be going? We have to find him!"

"But Mr. Mace," Gail was visibly

perplexed. "Mike will be back tomorrow for his pay. Surely a day won't make any difference."

"You haven't any idea in the world what a difference a day will make!" Malcolm Mace almost screeched, grabbing his hat. "You haven't any idea! We must find him. Immediately!"

"But Mr. Mace," Gail began, "I don't—"

"Stop standing there spluttering!" roared Malcolm Mace, face purpling. "We have to find him. Get your coat. Come on. You can tell me where he intended to take those shots while we're driving!"

He seized the startled girl by the arm, half dragging her along with him.

CHAPTER III

Berserk Pursuit

GAIL LEE, astonishment written on her lovely features, watched Malcolm Mace savagely kick the starter on his sleek roadster some five minutes later.

"Mr. Mace, I can't understand. What has Mike done, that you have to find him immediately? What's it all about?"

"Never mind what it's all about," Mace snapped angrily, desperate at the thought that Foy was probably wasting precious plates at that very moment. "Just tell me where he intended to take those pictures, for the love of heaven, Gail. Tell me!"

"The zoo, I think," Gail began.

"The zoo!" wailed Mace. "Oh God, the zoo!"

"Yes," Gail frowned, "he thought that some clever studies of the baboons would—"

"Baboons?" Mace's voice was an almost hysterical bleat. In his mind was a confused panorama of baboons and billions of dollars. Mike Foy, snapping away the world on monkey pictures!

Mace swung the car out from the curb, pressing his fist down on the horn as he did so. They roared straight through a traffic light at the corner, horn blasting deafeningly.

"Please!" Gail was frankly terrified at the strange behavior of her boss. "Please, Mr. Mace, you'll kill us both. Slow down!"

"Shut up!" snapped the frantic Malcolm Mace, smashing down even harder on the accelerator. His face was a mask of furious frustration and hysterically desperate hope.

"Oh God," he groaned, "baboons!"

The thought prompted him to put on even more speed, and the roadster swung around onto the park drive on two wheels, blasting down the boulevard like a creamy streak.

White-faced and terrified, positive in the assurance that Malcolm Mace had gone stark raving mad, Gail buried her face in her hands, a futile effort to shut out consciousness of the nightmarish journey.

Five minutes later, with a terrifying screech of brakes, the cream-colored roadster jolted to a stop in front of the Municipal Zoo. Mace grabbed Gail by the arm, pulling her along with him as he half ran, half stumbled toward the monkey houses.

The fact that it was early afternoon explained the absence of the usual crowds of spectators in front of the monkey cages. But there was nothing to explain the absence of Mike Foy. He was nowhere in sight.

Mace turned furiously on Gail.

"I thought you said he was coming here!" he stormed.

Frightened, certain that she had to humor a lunatic, Gail Lee answered in a breathless spasm of terror.

"He said he was, honestly, Mr. Mace.

He said he was. I don't know why he isn't here!"

An attendant was sleepily sweeping out one of the cages. Mace spied him, and still holding Gail by the arm, hurried over to him.

"Did you see anyone around here taking pictures of the baboons?" he bleated.

"Hey?" The attendant scratched his head.

"Baboons, you fool! Did you see anyone around here with a camera, taking pictures of them?"

"Yer mean a photographer feller?"

Mace dangled, for an awful instant, on the verge of apoplexy. "Yes, *yes,* YEEEEEEESSSS! A photographer!"

The attendant smiled, languidly, thoughtfully.

"Waal, reckon I might have. Come to think of it—"

"Did you," Mace was almost frothing by now, *"or didn't you?"*

"Yeeeeup, guess I did, awright."

"Where did he go?" Mace was fishing for his wallet with his free hand, still grasping Gail with the other. The attendant sighted the wallet, caught the implication, and closed his lips in a tight smirk, expectantly.

MACE frantically fished out a ten-dollar bill with his teeth, put back the wallet and hurled the bill in the attendant's direction.

"Where did he go?" Malcolm Mace screamed.

"Didn't talk much with him," the attendant began, pocketing the bill.

"I don't care if you sang hymns with him!" the frantic Mace screeched. *"Where did he go?"*

The attendant shook his head silently, as if to himself.

"He said something about taking a pitcher of them new petunia beds we got."

Mace's grip on Gail's arm tightened, this time as though for support.

"Pet — petunia beds!" he moaned horribly. "Petunia beds!"

"Yeeeeup," said the attendant, gazing somewhat narrowly at Malcolm Mace. "Petunia beds."

"Where are they?" Mace croaked hoarsely. "Where are these damned petunia beds?"

"Yonder," said the attendant, pointing vaguely at a building some two hundred yards away. "In that greenhouse."

Mace turned Gail and started off, then stopped abruptly. He shouted at the once more busy attendant.

"One thing more." His voice was as ragged as the edge of a saw. "How many pictures did that fellow take of the baboons?"

"One, I guess," the reply floated lazily back. "Can't rightly tell, though."

"Baboons," Mace babbled frenziedly, propelling Gail toward the greenhouse. "Baboons, and now petunias! Ohhhh, that leaves only four!"

He was wailing quietly to himself now, as they struggled breathlessly toward the greenhouse. Sobbing like a child.

"Four left," he murmured idiotically, "four left, and maybe less. Ohhhhhh!"

Gail was certain that Malcolm Mace had lost his mind. But she couldn't resist the question that had been burning inside of her.

"Four what, Mr. Mace? What is it that Mike has? What is it that you want?"

"Those damned plates!" Mace bellowed, digging his fingers into the girl's arm as though he could squeeze the plates forth. "I must have those damned plates!"

Gail shuddered inwardly. Mace was stark mad. That was all there was to it. Running wildly after poor Mike's

half-shot plates. Plates that might be useless, for all anyone knew.

Gail's course was clear to her now. She would remain with Malcolm Mace. Try to help as much as possible, until she could steer him quietly and without fuss to his home. After that, with Mike's help, they could call in a private physician. But for the moment, she must stay by his side.

They entered the greenhouse in a stumbling run. Mace was perspiring freely, his tie askew, face streaked with sweat, eyes wildly searching up and down the place for some sign of Mike Foy.

A quiet, mild-looking old gentleman was standing over a potted plant, microscope in hand, peering down at the flora fondly. Mace grabbed him by the shoulder, almost jarring him off balance.

"Is there a photographer around here?" he screamed in the old man's ear.

The old gentleman blinked at him in shocked surprise. The surprise gave way to a rising indignation as he pulled his arm from the grasp of Malcolm Mace.

"Sir?" the old voice vibrated with righteous indignation.

"Photographer, don't y o u understand? Is there a photographer around?" Mace was pleading.

"He means," Gail cut in, "have you seen a man taking pictures in the greenhouse here? A big chap, black hair, rumpled tweeds, carrying a camera. Have you seen him?"

SOME of the rage subsided in the old gentleman as he gazed at Gail.

"Yes," he said, after a moment of reflection. "Yes, I think that I have seen a young man, answering to your description, taking a picture here."

"How long ago?" blurted Mace frantically. He was fishing into his wallet again.

"Hmmmmmm, perhaps five minutes ago," said the old gentleman thoughtfully. "Yes, I'd say it was five, possibly six minutes ago."

Mace held out a five-dollar bill, at which the old gentleman blinked bewilderedly.

"Here, Bud," Mace hissed hoarsely. "Five bucks for you, if you tell me where he went, and how many pictures he took here!"

The old gentleman gazed in astonishment at the bill resting in his palm.

"I don't—" he began.

"Okay, okay!" Mace was close to gibbering. "Here's five more, if that's what you mean." He pulled off another five from his roll. "Now, for the love of God, Bud, tell us where he went, how many shots he took of the damned petunias here!"

"There are no *damned* p e t u n i a s here," the old gentleman replied frostily. "We have petunias, yes, but no damned petunias!"

Mace turned pleadingly to Gail, his face purple with frustration and frantic anxiety.

"Tell him," he moaned. "Oh Lord, tell the old goat what I want to know!"

The old gentleman looked at the ten dollars in his hand, still apparently uncertain as to how the bills got there. Then he looked at Gail, shrugging his old shoulders perplexedly.

"I don't quite know what this is all about," he said. "But the young gentleman who was taking pictures of the petunia bed left five or six minutes ago for the Lily Pond where, I overheard him say, he was going to take some pictures of the swans."

"Gluuumphuumph!" croaked Mace wildly, shrilly. "Now it's swans!"

"Yes," said the old gentleman. "Swans."

"How many pictures did he take of the petunias?" Gail asked.

The old gentleman frowned. He thought for a moment, to the accompaniment of Malcolm Mace's low gibbering.

"One," he said at last. "Just one, I believe."

He blinked his eyes as the foaming Mace and the girl turned and dashed madly from the greenhouse. Then he blinked at the ten dollars in his hand, blinked a third time, and pocketed the money. A moment later, and he was lost in microscopic contemplation of his potted plant.

CHAPTER IV

Malcolm Mace, Schemer

"WHERE is the damned Lily Pond?" Malcolm Mace demanded of Gail Lee, as they stood for an instant outside the gates of the wild life section of the park.

"In there," said Gail.

"Why," screamed Mace hoarsely, "are we standing out here chatting, then?"

With that, the once-dapper and now disheveled Malcolm Mace seized the girl by the arm again and hustled her into the wild life preserve.

"Three left," Mace babbled incessantly, "only three! Maybe less, ohhhhhhhhh!"

Gail looked at him sympathetically, wondering what had caused him to lose his grip, but said nothing. Two minutes later and they were beside the Lily Pond.

"This is it?" demanded Mace, eyes flicking left and right for a sight of Mike Foy. "This is it?"

"Yes, but I don't see Mike around," Gail answered, fearfully waiting another raving outburst from Mace.

Malcolm Mace opened his mouth to oblige with another demonstration of frothing lunacy. Opened his mouth, and snapped it shut again. His eyes suddenly gleamed, his jaws worked, he grabbed tightly at Gail's arm again.

"There," he husked, his voice a trembling whisper. He was pointing a shaky finger across the pond. "There he is. Oh, thank God! Thank God!"

Gail squinted. Then relaxed. It was undoubtedly Mike Foy on the far side of the pond. Mike Foy, beyond earshot, however, and intently fixing his camera on a floating swan!

"Foy!" Mace bellowed. "Mike Foy! Heeeeeeeeeeeeey! Stop! Foy, for heaven's sake, wait!"

But Mike Foy, unable to hear them, continued lining up his lens for a shot of the swan. Mace turned wild-eyed to Gail.

"How do we get around to the other side?" he demanded, his eyes glittering with a tinge of madness. "Quick, quick! How do we get around to—"

"Just a moment," Gail cut in. She wrinkled her pretty brows in thought. "We'll have to go back the way we entered the wild life section and go in through the west gate. That's probably how Mike entered."

"Come on, then! For the love of all that's holy, COME ON!"

Mace was tugging her along again, stumbling, sobbing, his lungs searing from the pace to which they'd been forced.

Somehow, they made the gate by which they had entered several minutes previously. Made the exit, and at Gail's direction had turned to find the gate leading to Mike's side of the pond, when a voice bellowed behind them, and a hand caught Malcolm Mace by the shoulder!

"There you are! Gotcha at last!"

Mace turned, white-faced and mad-eyed, and Gail wheeled also. Towering

above them was a huge, perspiring policeman!

"Gotcha!" repeated the cop breathlessly, tightening his grip on Malcolm Mace's shoulder.

"Let us go!" Mace screeched. "I don't know what you want, but it's life and death for us. Let us go!"

The cop merely glowered.

"Don't know what I want, eh?"

"No," Gail cut in.

She was mentally debating whether or not to turn Mace over to the policeman. Then she decided against it. Better to get him home with Mike's help, as she had originally planned, and give him over to the care of his regular physician. It might, after all, be just a touch of the sun. She remembered that Mace had left the office early yesterday to play golf. There might have been too much sun.

"No," Gail repeated as soothingly as she could to the officer, "we don't know what you want."

"You people were in the cream-colored roadster that was parked outside of the Zoo, wasn't yuh?"

THE cop placed his hands on his hips and glared accusingly. Before Gail could stop him, Mace fished into his pocket and pulled forth his wallet.

"Yeah, yeah," Mace blurted hurriedly. "I suppose we're parked illegally. Okay, okay, we're parked illegally, then! Here's ten bucks, if you'll wait by the car for us!" He pressed a bill into the cop's paw.

The cop took the ten-dollar bill, scrutinized it, while red began to rise from his collar to his beefy face. Gail didn't have to be a mind-reader to tell that Malcolm Mace had made the wrong gesture.

"Soooooo," spluttered the cop explosively, "it's bribery, eh? Yuh think yuh can bribe an officer, do yuh?"

Gail tried to think of something to say, something to soothe him. Mace had turned deathly white. His eyes were still darting desperately over his shoulder, to where the gate leading to Mike Foy was located.

"Yuh was speeding, from Tenth Avenooo on, that's what yuh was doing, smart guy! Parking, indeed! That ain't what I got on yuh, Buddy. Speeding is the charge. I chased yuh in a taxicab from Tenth Avenoo to the Zoo here. Finally caught up wit' yuz! Yere coming along wit' me!"

"But Officer!" Mace croaked. "Officer, you can't DOOOOO this to me!"

The policeman's arm went tight around Malcolm Mace's well-tailored waist.

"Well, now," he said with heavy sarcasm. "Yuh was doing ninety-five on the boulevards, and yuh decide that I can't arrest yuh!"

"Please," said Gail, turning her red hair and gray eyes to full effect on the cop. "Please let me explain, Officer!" She managed a winning smile.

The big policeman hesitated, relaxed his grasp on Malcolm Mace. There was no question about the fact that Gail Lee had something. Something that made men forget their troubles. The same something that Cleopatra turned on Mark Antony to make him forget *his* duty.

The cop was hardly a Mark Antony. He hesitated, blushed.

"Well, lady, what yuh got to say?"

Gail stepped to the side a few paces, crooked a charming finger at the cop. He looked at Mace doubtfully, then leaned over next to her ear. Gail whispered. The blush that had started in a quiet tone of pink grew crimson, flooding the be-duped officer's face to the top of his head. He coughed discreetly, turned to Mace.

"Well—uh—that kinda makes it dif-

ferent," he stammered. "How wuz I tuh know that—er— Aw, shucks!"

He fished into his pocket and produced a cigar, which he stuffed into the grasp of the startled Malcolm Mace.

"Here," the cop blushed even more painfully. "Excuse me, mister. And congratulations!"

"W-w-w-w-w-w-we can go?" Mace bleated like a rescued mariner.

"Yeah," the officer blushed again, "and don't fergit my congratulations!"

Beaming, the cop watched the girl and the flustered, frantic, mustached man dash off toward the other entrance of the wild life section of the park. Suddenly the officer frowned, scratched his head. There was a dawning suspicion in his female-befuddled mind that something was not right.

It was occurring to the cop that he had been the victim of a hoax, a dirty rotten hoax, perpetrated through perfume and feminine wiles. For what would any sane, just-married couple, be doing dashing around a zoo for a honeymoon?

"Cripes," he muttered, "I've a hunch she lied to me!"

But the frenzied chap and the redheaded girl were now out of sight. The officer bit his lip in rage. Then he looked down at his hand, and his expression relaxed somewhat. He still had the ten bucks—honeymooners or not.

CHAPTER V

A Bit of Blackmail

"HE'S gone," wailed Malcolm Mace, standing beside Gail at the other side of the Lily Pond. "Foy has gone!" He was sobbing again. "That damned copper held us up until Foy left!"

Gail, however, was paying scant attention to the wailings of Mace. She was looking around the pond, around the grounds that surrounded it.

She spied a uniformed park attendant. Subconsciously, in addition to accepting the fact that Malcolm Mace had gone off the brink, she was also influenced by his nerve-shattering eagerness to find Mike Foy.

On a hunch, she approached the attendant.

"There was a young man here, taking pictures of swans a little while ago," she began.

"Yeah, lady. I seen him."

"Did he talk to you when he was working?"

The uniformed minion shook his head.

"No. Just when he was leaving. He asked where he could find the squirrels."

Gail was back beside the piteously moaning Mace in an instant.

"I've found out where he went," she said breathlessly.

Mace turned a haggard countenance to her.

"Where?" he said lifelessly.

"To the squirrel cages!"

Mace looked at her, eyes filled with infinite pain.

"Ohhhh, don't. Don't tell me that! Squirrels! I can't stand it," he sobbed. "First it's baboons, then it's petunias, next it's swans, and now it's squirrels! Stop! Don't tell me any more!"

"Come on," Gail urged soothingly. "We can catch him at the squirrel cages. Don't you want to find him any longer?"

Mace shrugged, giggled, shrugged again. The world had collapsed around his shoulders. He would lie here on the brink of the Lily Pond and die. If he didn't die immediately he would throw himself to the swans. They might possibly do him the courtesy of eating him alive. He didn't know. He didn't care. If the swans didn't eat him, perhaps the

frogs would oblige by kicking him to death.

"He's used up all the pictures, all the plates," Mace answered tonelessly. "What's the use?"

"Have you gone utterly mad?" Gail stormed. "Of course he hasn't used all the plates! He must have one or two left. Otherwise he wouldn't want to go to the squirrel cages to take more pictures!"

Malcolm Mace sat bolt upright. He rose to his feet, the wild gleam of hope springing once to his eye. He had been mad, the strain had almost licked him. Of course there must be plates left! Even one. Even one—and his dream would be fulfilled. He'd have the world at his feet, even if he could only wrest one plate from that fool Foy!

"Where," he croaked, choking on the words, "are the squirrel cages?"

Wordlessly, Gail Lee grabbed his arm, steering him along the path to the wild life exit. Two minutes later they were stumbling gaspingly along the walk leading to the squirrel sections.

A minute after that, and they were peering into the barred enclosure—a sort of natural arena — in which gamboled the fury nut-eaters. For a moment Mace, hanging hysterically to Gail's arm, looked frenziedly around the enclosure. Then he squealed hoarsely, pointing through the bars.

"There he is! It's Mike Foy!"

Mike Foy turned his head at the voice—a difficult feat, inasmuch as he was hanging by his knees from a tree in the center of the natural arena. Hanging by his knees—upside down!

"Mike!" Gail shouted, while Mace babbled incoherently.

"Shhhhhhh!" hissed Mike Foy from his topsy-turvy position.

MIKE held his camera, and was trying to focus it on an assortment of squirrels beneath the limb from which he hung. In his free hand was a bag of peanuts which he let dribble one by one to the ground, in order apparently to gather more squirrels beneath the tree.

"Come down!" Mace had at last found his voice. "For heaven's sake, Foy, come down!"

He was praying desperately that Foy hadn't put one of the precious plates in the precariously dangling camera.

"Shhhhhhhhhh!" hissed Foy, sharply. "Do you want to drive them away?" Then, "I've spent my last nickel on these peanuts, in an effort to get them to pose. Keep quiet. I've only one plate left, and I can't waste this shot."

"One plate!" Mace shrieked earsplittingly. "Is that all?"

"Damn!" Foy exploded. "See what you've done! You drove them away!" The squirrels had scurried out from under the tree.

"Come down, Mike!" Gail put in sharply. "The squirrels don't make any difference!"

"Pleeeeease come down!" Mace had dropped to his knees before the bars of the enclosure. Tears streamed down his overwrought face. "I want to buy that plate from you, Foy! I can pay cash —*cash!*" he sobbed.

Mike Foy, still upside down, frowned.

"You mean this one?" he said, fishing a plate out of his camera and holding it loosely in the air.

"DOOOOON'T!" Mace bellowed hysterically. "Come down, don't dangle that thing, I'll pay you anything for it, Foy! Anything!"

All caution was thrown to the winds at the sight of Mike Foy nonchalantly dangling the priceless plate above the cement floor of the enclosure, while hanging upside down by his knees.

(Continued on page 132)

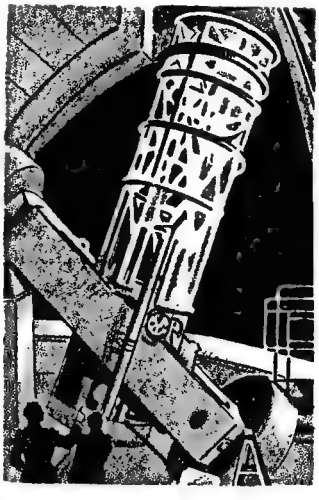
Scientific

TODAY, AS FOR CENTURIES, THE **RIDDLE** THAT PERPLEXES SCIENCE MOST IS THE **MOON** WHOSE MYSTERIES **LIE JUST BEYOND** OUR FINGERTIPS

JOE SEWELL

THESE CIRCULAR **CRATERS**, SOME OF THEM **60** MILES ACROSS HAVE WALLS TOWERING **13,000 FEET**. THE CENTRAL CONES ARE ODDLY SMALL . .

WHAT CAUSES THE GIGANTIC **CRATERS** ON THE **MOON'S** SURFACE? NO VOLCANIC ACTIVITY COULD HAVE FORMED THEM . .



When THE MIGHTY **200 INCH** MT. WILSON **TELESCOPE** IS AT LAST TURNED ON **LUNA**, WILL SCIENCE SOLVE PROBLEMS THAT HAVE **MYSTIFIED** THEM THROUGH THE AGES?

Mysteries

THE MYSTERY OF THE MOON

By Joseph J. Millard

STEP out your door on a clear night and look upward at the most fascinating and, at the same time, most maddening mystery that perplexes astronomers today—the moon!

Closer to the earth than any other visible heavenly body, we know more about the moon than about any other object in space. Modern telescopes bring the lunar landscape to within an apparent distance of only twenty-five miles. Yet the very mysteries we most seek to solve lie mockingly just beyond our eager fingertips.

We don't know where the moon came from, how long she has been circling the earth or what she is made of. We don't know the nature of the mysterious silvery streaks across her face, the cause of those gigantic "volcanic" craters.

Although the moon shines with reflected sunlight, we don't know why moonlight possesses strange and wonderful properties unknown to the sun's direct rays.

We have even begun to believe that not many ages past, mankind roamed the earth under a night sky that contained no moon at all; that suddenly there were *two* moons and then one of those moons fell upon the earth to change our climate, destroy life and create a new continent.

IS THE MOON DEAD?

We *think* the moon is a dead, airless, lifeless globe. But we cannot be sure because four-tenths of the moon's surface have never been seen from the earth. What lies on that unknown side in perpetual darkness, we can only conjecture.

If, as a great many scientists believe, the moon was torn out of the young earth ages ago (leaving the hole we now call the Pacific Ocean) it is conceivable that human beings were trapped on the hurtling orb and carried out into space on the newly-created world. While we know that temperatures on the face of the moon reach 250 degrees above zero in the sun and as much as 200 degrees below in the shade, we don't know but what life is possible on the unseen far side.

Anyone with opera glasses or even the naked eye, can see the strange silvery streaks that flow out in all directions from the larger craters of the moon. But no one knows, nor has any scientist been able to offer a reasonable guess, as to what that silvery matter is or what created it. Perhaps there is an unknown moon-element, unlike anything on earth, waiting for some daring space-miner to start a moon-rush.

From the most ancient times, people have believed that moonlight held a strange and mystic power over human minds. Our word "lunatic" comes from words meaning "moon-struck". For centuries science scoffed at the idea but now experiments are beginning to reveal strange and unknown properties of the moonlight.

In one experiment, crystals of starch were turned to sugar by moon rays and it is known that in Egypt, fish will decay rapidly on nights when the moon is full. Fresh milk has been known to curdle when left in the moonlight. In the Hawaiian Islands, visitors are amazed to see moon rainbows more vivid and colorful than any produced by the sun.

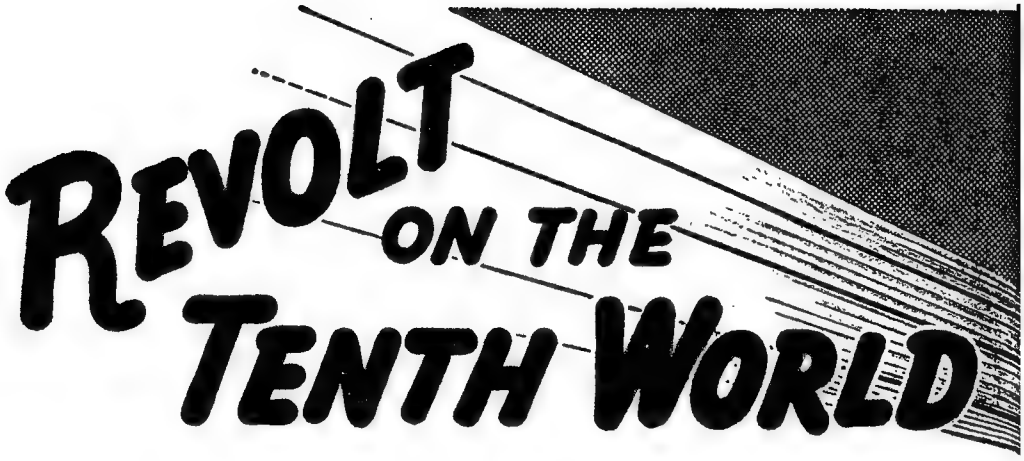
HER BIRTH A MYSTERY

Science has never been able to agree over either the origin or age of the moon. Some believe her a wanderer from space, accidentally trapped by Earth's gravitational field. Others believe her a sister orb, created at the same time as the earth by the same unknown event. Still others, and these seem to be in the majority, believe the moon was once part of the earth, torn away when our world was still young and fluid.

Innumerable legends from peoples all over the world, tell of a time when earth had no moon. The Greeks tell of Preselenites who inhabited Gondwana or Lemuria before the coming of the moon. The Chibchas in Colombia tell that Bochica created the moon *after* the deluge. The Bushmen tell of the existence of a huge continent west of Africa (where Lemuria is believed to have existed) and tell stories of the time when earth had two moons until one of those moons fell upon the continent, blotted it out and caused the deluge. Many other races around the globe have tales of the moon's falling upon the earth to cause the Flood.

It is also noteworthy that many highly civilized races in both the old world and the new changed their calendars to reckoning by Lunar or moon-months at about the same time in history. The pre-Egyptians, the Babylonians and, in America,

(Concluded on page 137)



by EDMOND HAMILTON

"SAY that again!"

Jimmy Crane's voice was hoarse with passion, his worn, space-bronzed young face quivering, his lean figure crouched rigid.

The softly lighted Café of Nine Worlds in the Martian equatorial city of Gyros was stricken to silence, all the motley interplanetary throng in it watching the young Earthman.

Crane stood against the bar where he had been drinking Saturnian fungus-liquor a moment before. He had swung about to face the chunky Venusian space captain who had just spoken.

"I'll say it again!" declared the Venusian loudly, eying Crane in bitter contempt. "I won't drink at the same bar with a man responsible for the death of six hundred space passengers—a pilot who wrecked his ship and killed all those people, but saved himself. I'm damned if I'll rub shoulders with a murderer!"

"Why, you—" Crane choked, dived at the Venusian, and got his hands around the captain's throat.

Next moment he was pulled off. The massive Martian who was proprietor of the Café of Nine Worlds had intervened.

"No fighting in here," rasped the Martian. "You'll keep peace or leave."

"I'm leaving, anyway," sneered the Venusian captain. "The air in here is too bad for me!"

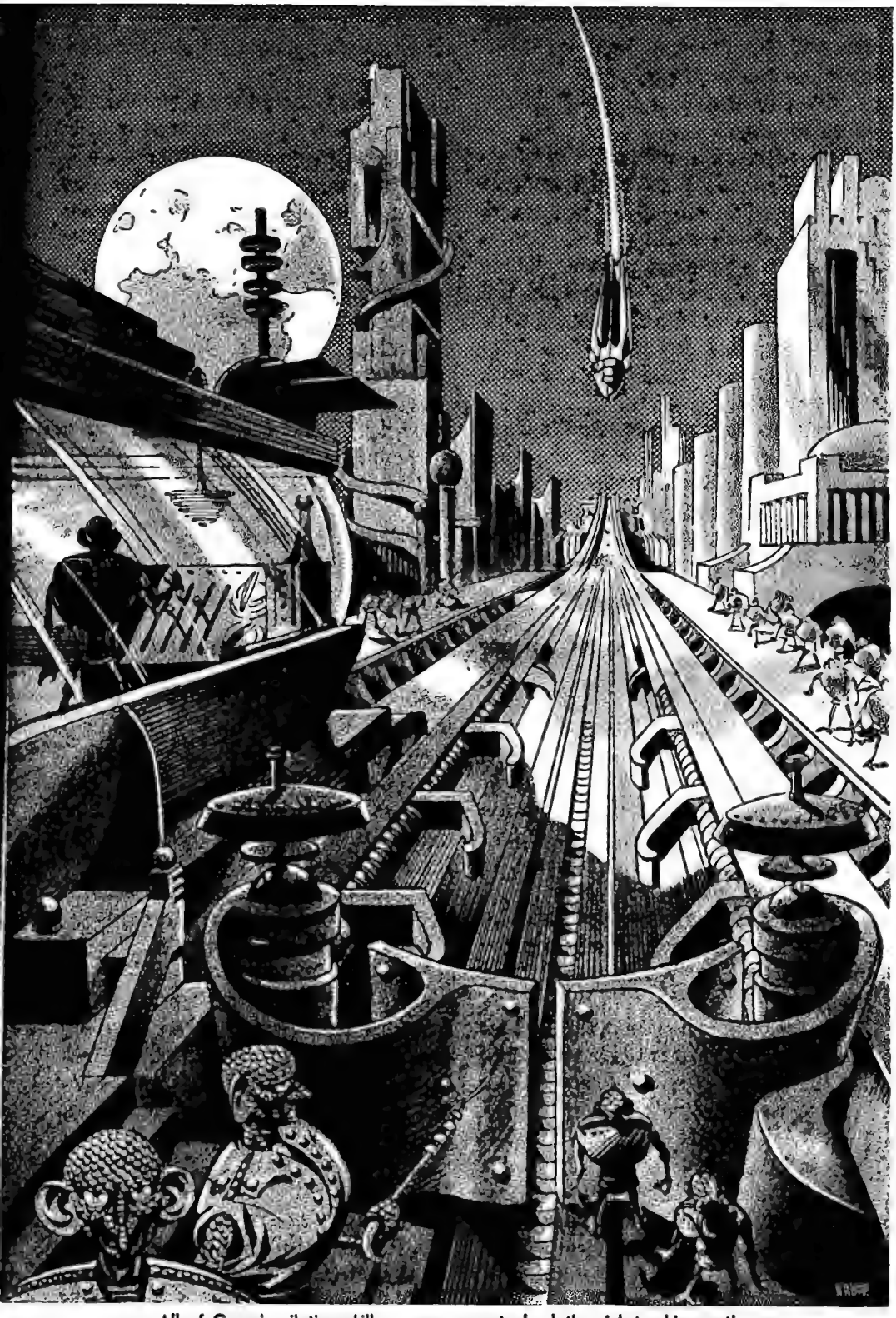
Crane, quivering with impotent anger, saw the Venusian stalk out. He saw the scorn and condemnation in the eyes of all the spacemen in the place—bitter contempt they all felt for him.

He turned back around to the bar, shoved his glass forward.

"Another," he said thickly.

Other spacemen along the bar had elbowed away from him. All except two men—a big, hulking Jovian and a wizened Mercurian.

The Tenth World was not the planet Jim Crane wanted to hail from—but public opinion had condemned him to a lifetime on this mythical world of shame



All of Crane's piloting skill was necessary to land the rickety ship on the ways

"So you're Crane, the pilot that wrecked the Vulcan?" said the Mercurian to him curiously.

"What the hell is it to you?" Crane asked roughly.

The Mercurian grinned. "No offense. Kad and I don't give a damn what you did—seeing as how we're Tenth-Worlders ourselves."

It was a significant phrase. There were but nine planets—so outlaws and criminals who could call no world their home were called Tenth-Worlders. Only Tenth-Worlders would associate with Crane now!

Crane, moodily staring into the chromaglass mirror behind the bar, was really tensely watching a Saturnian across the room, a very fat, gray-skinned individual with a moon-like face. Now Crane stiffened as he saw the obese Saturnian get up and approach the three at the bar. Maybe, Crane thought tensely, what he had hoped for was at hand.

"Greetings, gentlemen," the fat Saturnian said to them in a purring voice, his small, shrewd eyes beaming. "I am Ul Kuil."

The Jovian beside Crane stared at the fat gray man with all the age-old enmity that lies between Jupiter and Saturn.

"So what?" sneered the Jovian.

"You," said Ul Kuil softly to the Jovian, "are Kad Karo, hunted by the Jovian police for murder and space piracy."

The hulking Jovian stiffened, and his hand went to the atom-gun at his hip.

"You're a police spy?" he grated.

UL KUIL shook his head placidly. "I assure you I am not." He turned his shrewd eyes on the little Mercurian. "You are Nigor Quae, under sentence for piloting a drug-smuggling ship."

The Mercurian swore viciously. He and the Jovian were like two beasts ready to spring, as Ul Kuil turned toward Crane.

"And you," purred the Saturnian, "are James Crane, first officer and pilot of the liner *Vulcan*—until your pilot's license was canceled for negligence when you ran the liner into a meteor-swarm and wrecked it with the loss of most of its passengers. You're a spaceman who can't ever pilot again."

Crane had been tense ever since the Saturnian's approach. But he kept his voice harsh and level as he answered.

"Never mind the ancient history!" he snarled. "What are you rocketing in here for if you're not a police agent?"

"Yes, what do you want?" hissed the Mercurian.

Ul Kuil smiled blandly across his gray moon of a face.

"Gentlemen, I have come to offer you honest employment."

"Ho!" guffawed the loutish Jovian. "That's good—offering work to two Tenth-Worlders and a de-licensed space pilot!"

"You've all three been spacemen," Ul Kuil continued imperturbably, "and my employer needs good pilots. It won't matter that you don't have licenses. It's the men we want."

Crane frowned as though he didn't understand, and said skeptically,

"You really are offering me a pilot job? Where?"

"On Umbriel, second moon of Uranus," Ul Kuil replied. "Jan Vliet, my Earthman employer, maintains a mining base on that wild little moon and needs pilots to transport his mineral shipments to other planets."

The little Mercurian stiffened. "So *that's* your job!" he hissed. "Flying umbron for that black devil Jan Vliet. No, thanks—you'll never get me to pilot in that trade!"

"Nor me either," swore the Jovian,

gulping his drink and setting his glass down with a crash. "Not while I'm sane."

"The police will get you sooner or later and you'll go to prison for life," Ul Kuil declared. "You'd be safe out at Umbriel—you wouldn't be required to fly to worlds where you're wanted."

"I'll take prison any day before I'd go to Umbriel and join Vliet's pilots!" swore the Jovian. "Flying umbron between worlds is as safe as kicking a Venusian swamp tiger in the teeth."

Crane frowned. "Why? What is this umbron stuff, anyway?"

"It's simply a valuable mineral—" fat Ul Kuil began.

But the Jovian interrupted. "It's pure poison, that's what it is," he told Crane vehemently. "It's an isotope of radium, so demoniacally radioactive that no matter how you insulate it, its radiations affect a space ship's instruments and drive them haywire. With a load of umbron in your ship, you can't rely a minute on your space sextants, meteorometers or other instruments. You fly blind in space!

"That's why the law forbids umbron to be shipped on ordinary freighters or liners. That's why Jan Vliet has to have his own pilots and small cruisers to fly the stuff to other worlds.

"And that's not all of it," the Jovian continued heatedly. "That cursed moon Umbriel is a crazy jungle of the damnedest planetary natives ever heard of—the Greenies, fierce, half-human devils with ninety-odd weird ways of killing a man. Even if you scrape through the umbron trips, the Greenies there are likely to get you."

"Come, it's not that bad," protested Ul Kuil. "Vliet has got around the Greenies—even uses them for laborers. And he pays his space pilots well."

"He doesn't *have* to pay many of 'em—they never live to collect!" sneered the Jovian. "Which suits Black Jan Vliet fine—he adds it to the millions he's got cached somewhere on that devil moon. Millions he wrung out of the blood of dead pilots!"

AND the Jovian turned savagely. "Come on, Nigor—we'll keep rocketing the Tenth-World trail before we ever join up with Vliet's legion of damned souls!"

The hulking Jovian and the wizened Mercurian strode out of the busy Café. Ul Kuil looked after them sadly.

"Too bad," murmured the fat Saturnian. "They'll never get off Mars—the police will get them sure. They'd have done better to accept my offer."

Then Ul Kuil looked at Crane with his shrewd little eyes.

"What about you, Crane? You're no Tenth-Worlder—but as a de-licensed pilot, you're even worse off. Space-flying is the only thing you know. You've trained all your life for it, and now you can't ever rocket again.

"That's worse than death to a pilot like you, isn't it? Never to blast off again? But you never can—unless you join Vliet's outfit. He's the only one who would ever hire you now."

Crane knew that he mustn't seem too eager to take the job. He smiled sourly at the fat Saturnian.

"Got it all figured out, eh? What about this umbron—is it really as dangerous to transport as those two claimed?"

"No, of course not," purred Ul Kuil.

"But if the stuff's so valuable that your boss has really made millions out of it, can't you find a better way to ship it?" Crane demanded.

He saw Ul Kuil's small eyes narrow, and Crane went cold inside. Did the Saturnian suspect what he was getting at?

"The talk of Vliet's millions is just

idle rumor," Ul Kuil declared. "He does make a fair profit from the umbron, and he pays his pilots well. What about it, Crane?"

Crane shrugged. "I'll sign on. You know damned well I've got to, if I want to fly space again." He made his voice bitter.

"Good!" approved Ul Kuil. "We'll leave at once. The cruiser that brought me here to Mars is out at the space port. Got any duffle? No? Then come on along."

The space port was just outside the old city, under the equatorial stars and the forked light of the two hurtling moons. The cold air was nipping, and spinning little sand-devils whisked like vagrant ghosts of Mars between the docks and rows of parked ships.

Ul Kuil waddled toward a small, battered cruiser of stubby lines that lay in the darkness by the edge of the space port.

"You'll meet Whitey Kane, one of our other pilots, who brought me to Mars for recruits and supplies," Ul Kuil wheezed as he waddled along. "He's an Earthman too—old-time veteran pilot."

"This is a plenty old-time ship you've got," Crane commented disparagingly as they approached the antiquated cruiser. "If it's a sample of Vliet's umbron cruisers, it'll be some fun rocketing for him."

Ul Kuil glanced slyly sideward at him.

"Well, we can't afford to buy expensive, brand-new ships—"

"Not when you lose so many ships and pilots, eh?" Crane retorted.

When they entered the lighted cabin of the craft, which was crowded with piled sacks and metal cases, a wiry old Earthman got up, stretching and yawning. His sparse hair was pure white, his face bronzed and seamed like leather by long exposure in space to unsoftened radiation.

"This is Crane, new pilot," Ul Kuil told the old veteran. "Only man I could get. The other two I was after refused to join up."

"Which showed their good sense," declared old Whitey Kane with a cackling chuckle. He eyed Crane. "You a Tenth-Worlder?"

"None of your business," Crane snapped, and Whitey chuckled again.

"No offense, lad. Come and help me start up."

CRANE went forward to the control cubby with the old man. Whitey started the cyclotrons droning, and then turned and with his face now deadly serious, whispered shrilly,

"Lad, listen to me—take my advice and jump ship before we start. A young fellow like you don't want to go out to that hell's moon."

"If it's so bad, why are you there?" Crane asked bluntly.

Whitey shrugged bony shoulders. "Only place I could keep rocketing—I was de-licensed for age, two years ago. But you—"

"I'm in the same fix, de-licensed," Crane said bitterly. "Go ahead. I know what I'm getting into."

"No, you don't, lad," muttered the old pilot. "You don't know Jan Vliet and you don't know the devil's brew of trouble that's boiling up out on that moon. But it's your funeral, after all."

Crane made no answer. The ship lurched skyward with a roar of tubes, the whole fabric of the old cruiser shuddering and creaking to the impact as its flaming exhaust hurled it away.

Crane looked up through the brilliant stars at the far, bright green speck of Uranus, and his heart beat faster.

"Umbriel!" he thought. "I'm on my way, at last!"

CHAPTER II

Legion of the Damned

SCREAMING protest in every stanchion, its aged walls shuddering and threatening to buckle under the thunderous braking blasts, the little cruiser decelerated. Uranus was a colossal green sphere bulking across half the firmament overhead. Beneath, the yellow-green sphere of the little moon Umbriel was expanding.

Crane held the rocket-throttles of the craft, and was constantly cutting speed as they dropped toward the moon. In the ten days of their flight out here from Mars, Crane had stood trick at the controls and had learned just how much power he dared to use without tearing the age-weakened ship apart.

"She'll stand just a mite more brake-blast, lad," calmly shrilled old Whitey Kane from his seat beside Crane. He watched approvingly as Crane expertly edged the throttles. "That's it, lad—you got a nice touch."

"Took me ten years to get it, and now it's no good except to nurse along an old crate like this on a run nobody else would take," Crane commented bitterly.

Umbriel was now broadening out below. Crane saw the small moon, only five hundred miles in diameter, as a curving convexity blanketed by thick, seething, steaming yellow-green jungle. It looked ugly and repellent in the pale wash of sunlight.

Thin air whistled outside as the cruiser rocketed down obliquely around the moon. A big scar on the ocher jungle showed ahead. It rushed closer, revealed itself as a small, compact clearing hacked out of the vegetation, with chromaloy buildings on it.

"There she is," old Whitey declared. "Only 'civilized' spot on Umbriel."

Crane detected the irony in the old pilot's words. Ul Kuil came waddling in and strapped himself into a chair.

"You'll land at the end of that row of ships," ordered the fat Saturnian.

Crane brought the old cruiser smoothly down to the line of a half-dozen parked ships. Rocket jets churned up the ocher soil furiously, then were cut out as the ship landed with a sharp jar.

"Neutronium slippers, lad," reminded old Whitey as Crane unstrapped himself. "Not much gravity to this moon, you know."

Crane nodded and slipped on the over-slippers that contained a thin plate of super-heavy neutronium to make his weight normal. Then, shuffling a little awkwardly, he emerged. Ul Kuil was waddling toward the chromaloy buildings, and they followed.

The sunlight was thin and weak, but the air was very warm from the core of radioactive matter that lay at the heart of this moon. The ocher soil crunched under their feet. In the brassy sky, the immense, dull-green sphere of Uranus bulged like an incredible moon.

Crane looked around curiously. The whole clearing was surrounded by a strong steel stockade. Beyond its outer side stretched the yellowish jungle—a *crawling* jungle, many of whose vines and snake-stemmed shrubs had the queer rootlessness and powers of locomotion characteristic of Uranian flora. The larger trees, black trunks bearing masses of flat fronds, were rooted.

The north half of the clearing was scarred by open rock workings. In them, laboring with picks and chisels, were some fifty semi-human, yellow-green creatures. They looked like hybrid travesties of mankind, bipeds whose limbs and arms seemed quite boneless, and whose conical heads and pupil-less eyes were wholly alien.

"Greenies," said Whitey carelessly. "Vliet uses 'em to dig out the umbron."

"I thought the creatures were fierce and hostile to all visitors," Crane declared.

WHITEY nodded. "They're fierce enough—make no mistake on that. May not have much brains, but they've sure thought up some sweet ways of killing. But Vliet got around 'em by offering high pay, and though we don't trust 'em much, they haven't tried any tricks on us—lately."

"Vliet *pays* those creatures?" Crane repeated incredulously. "What the devil would they do with money?"

Whitey cackled, "Vliet don't pay 'em money. He pays 'em in broken glass. You see, they've got an idol back there in the jungle they worship—a big fallen meteorite that happens to look something like a head—and they labor here in regular tricks just to get beautiful pieces of broken glass to offer to their crazy god."

They had passed the parked ships and were abreast of a low chromaloy building in front of which lounged several men in soiled, slovenly space jackets. Crane noticed a tall Martian, a squat Jovian, a Venusian and others. All were staring at him.

"That's the other pilots, there in front of the barracks," Whitey told him. "Come back when you've seen Vliet and I'll introduce you around."

Crane nodded, and as Whitey limped toward the barracks, Crane went on with Ul Kuil toward a smaller building, an office. It was a small, two-roomed metal hut, with rough living quarters in the back room, and a desk and chairs in the front room.

"We're back, Mr. Vliet," Ul Kuil called respectfully into the rear room. "But I was only able to get one pilot."

Crane was looking swiftly around the office. He didn't see any safe. But Vliet surely must keep his rumored millions and his records somewhere here. Where, Crane wondered tensely?

Vliet came stalking into the office from the back room, wiping his hands on a cellucloth towel.

"Time you got back, Ul," he declared, his voice harsh and deep, biting off each word. "I've had to stand double trick supervising the damned Greenie diggers. Haven't had much sleep."

He stared at Crane. "So this is the only pilot you got?"

Crane, his pulse pounding with emotions he tried not to show, returned Vliet's stare defiantly.

He knew now why they called him Black Jan Vliet. A strapping six-footer whose gaunt frame was all bone and muscle, Vliet had a shock of coal black hair, a dark, hard, aquiline face, and eyes as cold as two chunks of frozen jet.

"This is James Crane, former liner pilot, de-licensed for negligence," Ul Kuil was explaining hastily. "A good man, I think."

"I've heard of you," Vliet boomed to Crane. "Ran your ship into a meteor swarm off Saturn's orbit. Were you drunk?"

Crane flushed hotly. "Look here—" he began.

"Save it," interrupted Vliet. "I don't care what you did in the past. It's what you do for me from now on that counts."

The big mine owner tossed the towel away, hooked his thumbs in his belt, and continued harshly. Crane noticed that he wore a heavy atom-gun at the belt of his stained cellucloth breeches.

"Crane, I don't soft-soap men who sign up with me," Vliet bit out. "You're not here because you want to be. You're here because you damned well can't get a job piloting any place else, and we

both know it." His voice was harsh.

"You may have heard that flying umbron is dangerous, and that I'm a hard boss. Both things are true. Flying umbron *is* dangerous, and plenty. But a pilot who keeps off liquor and watches himself every minute he's in space can beat out the odds. It's up to you—remember, it's your neck."

VLIET went on. "Furthermore, I *am* a hard boss. You pilots, to me, are just a bunch of criminals, and what's worse, criminals who were stupid enough to get caught. I've not the slightest sympathy for any of you. But you obey my rules and do your job and you won't find me bad to work for. Try to buck me and you'll get it in the neck—I'm the only law there is on Umbriel."

Crane's dislike of this domineering, forceful personality was intense, but he could not deny a certain grudging approval of the man's harsh outspokenness.

"That's straight enough talk," Crane admitted. "Just what are the rules you spoke of?"

"First, you sign on for a year, and get your pay, five hundred per month, at the end of the year," Vliet replied. "That's to make it worth our while taking the trouble to bring you here—I can't be sending Ul to hunt pilots every month.

"Second, your duties will include servicing the ships. You must know rocket engineering to get a pilot's license. Third, you leave the Greenies strictly alone, inside or outside the Base. I'll have nobody starting trouble by trying to kick them around."

"All right—sounds fair enough," Crane said curtly.

"Whitey will show you where to bunk in the barracks," Vliet finished, dismissing him. "Oh, yes—one more rule—a personal one of my own. You'll leave Miss Ellis entirely alone, understand?"

"Miss Ellis?" Crane was genuinely astonished. "You mean there's a girl on this godforsaken moon?"

"There is," Vliet answered crisply. "She's a competent rocket engineer and that's *all* she is, as far as you're concerned."

Crane shrugged indifferently. "Okay, I'm not interested in your 'engineer'."

As Crane strode back out into the pale sunlight, his mind was working tensely.

"Where the devil does he keep his valuables?" Crane wondered. "He must have some kind of safe or hiding place there. I'll have to get a look through that office as soon as possible."

Old Whitey hailed Crane as the young pilot entered the long, chromaloy building that served as barracks. Its furnishings were rude—bunks along the wall, duffle-bags thrown carelessly about, empty bottles in a corner, and a Venusian swamp monkey, the outfit's mascot, shrilling from his perch on a uranite bulb on the wall.

There were four men lounging here, beside Whitey. They were a heterogeneous lot, representing four different planets. They eyed Crane with varying expressions as old Whitey made garrulous introductions.

"Boys, this is Jimmy Crane, our new partner. Crane, this here Martian is Lin Tikim, that escaped from Deimos prison two years ago and don't dare go near Mars now. That stringy Uranian is Quorbos, wanted on three planets for murder. Yonder big Jovian is Herk Kebem, that absent-mindedly broke his captain's neck one day in space. And that pretty-boy Venusian beside him is Kruppa—none of us know just what made *him* a Tenth-Worlder."

"Is this all Vliet's pilots?" Crane asked the old man.

"There's one other—Brad Allison, a

young Earthman," the old pilot told him. "Allison flew a shipment of umbron to Jupiter but ought to be back any time now."

Lin Tikim, the big, hard-bitten Martian, only nodded to Crane and said nothing. He looked tough, but a good man, Crane thought. Quorbos, the Uranian murderer, was a thin, yellow, suspicious-looking man who replied to Crane's greeting with only a muttered word.

But Herk Kebem, the huge, good-natured looking Jovian, grinned in friendly fashion.

"Hello, Earthman. You sure were out of your head to come here. I'll bet you regret it already, huh?"

Crane shrugged. "De-licensed pilots can't be choosers."

KRUPPA, the pallid, handsome Venusian, smiled sleepily.

"That is unfortunately true," he murmured. "Or I would not be wasting my time in this filthy hole."

"Nobody asks you to stay here," whined Quorbos, the thin Uranian, malignantly. "I, for one, will be glad when you crack up."

"Cut it, Quorbos," snapped big Lin Tikim, the Martian. "If you and Kruppa start scrapping again, I'll lay you both out."

Old Whitey plucked Crane's arm.

"Come on and I'll show you the cruiser that you'll be flying, lad."

Crane followed him out of the barracks.

"Nice bunch of boys you've got," he said ironically.

Whitey cackled. "Like a den of tigers, eh? I told you you shouldn't have come here."

"Isn't Vliet afraid to keep these rumored millions of his here, with such a tough gang about?" Crane asked.

He watched the old pilot closely, hoping for a lead. But Whitey, after a quick glance at him, answered only,

"It appears not."

Crane let it drop. He didn't want to arouse Whitey's suspicions. He followed the old man along the line of parked cruisers.

"This'll be yours," Whitey said, pointing.

Crane stared critically. "Old third-hand heap of junk, like all the others," he grunted. "Let's see inside it."

The door of the cruiser was open. Crane was starting in, when a figure emerging bumped into him.

"What the devil—" Crane began. Then he stopped, surprised.

It was a girl, slim in mannish space jacket and breeches, her crisp yellow hair brushed severely back from a face whose clear blue eyes and resolute mouth were the outstanding features. Crane thought her pretty as a hawk and as unfriendly looking.

Her lip curled as Whitey introduced Crane.

"So you're another Tenth-Worlder who fled out here to Umbriel to take cover," she said.

Crane was stung. He replied coolly,

"And so you're Jean Ellis, Vliet's 'engineer'?"

He stressed the last word ironically, and Jean Ellis' blue eyes flashed with resentment. She pushed past him, her face crimson with anger.

"Shouldn't have said that, lad," muttered Whitey uneasily. "She's got a temper, and she'll remember it."

"How long has Vliet had her here?" Crane asked.

"'Bout a month," the old pilot said. "He brought her back from a trip over to Uranus—said he'd signed her on as maintenance expert engineer."

Crane grunted skeptically. "Pretty thin. Well, I'm going to look over this old heap. See you later, Whitey."

Crane spent the next hour prodding into the interior of the little two-man cruiser. It was in deplorable shape mechanically, its cyclotrons patched up, its tubes fouled, its instruments erratic.

"Umbron *must* have a terrific effect on instruments," he muttered, deep in thought.

He heard the rocket roar of a ship landing, and looked out the porthole window. Another small cruiser was landing beside him.

Crane saw a haggard-looking young Earthman emerge, a youngster who had once been handsome but whose face was pale with fatigue. He guessed it was Brad Allison,the other of the pilots.

"Dissipated-looking kid," Crane thought. "But what the devil goes on here?"

His exclamation of surprise was caused by sight of Jean Ellis' appearance. The slim girl had run up to Allison, was embracing him, speaking to him earnestly.

Crane felt a wry disgust. "What a dame—two-timing Vliet right under his nose! But hell, it's none of my business."

A MOMENT later, he decided he might be wrong. For he glimpsed Jan Vliet's big figure striding down the line of parked ships toward them. Vliet had apparently seen Allison's landing. In a moment, the mine owner would come upon the pilot and the girl—

Crane stepped out of his cruiser and went around it to the man and girl. Allison looked up surprisedly, and the girl's eyes blazed with dislike at sight of him.

"Just because I'd hate to see trouble here right now, I'm taking time to tell you Vilet's coming down the line," Crane told them coolly. "You'd better postpone the lovemaking for a while."

Jean's face went white with fury. "Why, you—" she began angrily.

"Save it," Crane grinned. "It's all right with me if you want to be Allison's 'engineer' as well as Vliet's."

"You dirty rat!" exploded Allison. "I'll kill you for that!"

He tugged at the atom-gun in his belt. Crane instantly dived in a flying tackle that sent the other man to the ground.

Allison struggled furiously, trying to draw his weapon. Crane, wrestling with the young Earthman, heard a rush of running feet and the angry booming of Vliet's voice.

CHAPTER III

Under Uranus

CRANE got the atom-gun out of Allison's grasp and sent it spinning out of reach. But next moment he felt himself gripped by a powerful hand and hauled to his feet.

"What the devil is going on here?" Vliet boomed harshly as he pulled the two combatants apart.

"Take your hand off me!" Crane flashed, wrenching free. "You may be boss of this moon but you're not pushing *me* around!"

Vliet's black brows drew together ominously. But at this moment, Jean Ellis intervened.

"It's nothing important, Jan," she told Vliet coolly. "Brad and your new pilot got to scrapping when Brad asked this fellow if he was a Tenth-Worlder."

Brad Allison, flushed and panting and eying Crane in intense dislike, made as though to contradict the girl. But she made an urgent, surreptitious sign to the young Earthman, and he held his peace.

Crane saw the gesture, and grinned inwardly.

"Lady, I admire your resourcefulness," he thought.

"Well, quarreling with atom-guns is one thing I won't stand for—I need every pilot I've got," Vliet said cold-bloodedly. "Brad, you come along with me and report on your umbron delivery."

The haggard young Earthman followed Vliet toward the office. Crane turned his back on the girl and went back to inspection of his cruiser.

As he twisted a chain-wrench onto one of the fouled rocket tubes in the stern, to unscrew it for cleaning, Crane decided that he'd been foolish to intervene to prevent Vliet discovering the man and girl in each other's arms.

"None of my business, really," he thought. "But if there should be a big blow-up here, it would interfere with *my* plans. Otherwise I'd have let Vliet walk right onto that pretty picture."

Tugging at the recalcitrant rocket tube, he was a little startled by a cool, contemptuous voice from behind him.

"If you were a half-competent rocket man, you'd know that those tubes had a reverse joint," it said. "You can tug all day without getting it out that way."

Crane turned, sweating and exasperated. Jean Ellis stood watching him scornfully, her hands in the pockets of her mannish breeches.

"What the hell do you know about it?" he demanded.

"What the hell makes you think you can talk to me that way?" she snapped back, bristling.

Crane waved wearily. "Go away, lady—go play with your boy friends, either of 'em. But just don't bother me."

"You pig-headed idiot!" she snapped. "Here—give me that wrench."

She grabbed it out of his hand before he could protest, gave the rocket tube a reverse turn, pulled it out an inch, then swiftly unscrewed it.

"There, pilot," she said disdainfully, tossing the wrench to the ground. "Maybe you can carry on from there."

Crane watched her walk away. "Well, I'll be damned!" he muttered. "She does know something about rocket engineering. Wonder if she really took a job here on the level? Oh hell, no—what girl in her right mind would come to this little devil's world?"

Crane had finished cleaning the fouled tubes by the time the nine-hour day of Umbriel ended. As dusk came, he started, tired and dirty, toward the barracks.

URANUS glowed green and huge in the starred heavens overhead, casting its weird luminescence over the seething jungle outside the stockade. Crane saw the Greenies filing out through the gate in the stockade, watched by Vliet and fat Ul Kuil.

He learned that all here took their meals together in the metal cook-shack presided over by a nondescript, unclean-looking little Martian. Vliet sat at the head of the table, with Jean Ellis at one side of him and the paunchy Saturnian on the other. Ul Kuil ate noisily and with extreme gusto of the indifferent canned food.

Vliet looked down the table at his seven pilots, his black eyes sardonically amused.

"What a happy little family we have here!" the mine owner boomed satirically. "So united, so devoted to each other! It shows how the influence of raw nature can bring out a man's better side."

"Aw, you're just poking fun at us again," growled Herk Kebem, the big, simple-minded Jovian.

Kruppa, the Venusian, smiled sleepily.

"It's our employer's only amusement, Herk—to prod the prisoners in his little cage now and then. You shouldn't be-

grudge it to him."

"Thank you, Kruppa," said Vliet with mock courtesy. "And how do you like the prison cage by now, Crane?"

Crane shrugged. "Frankly, it's no pleasure resort. But I expect to make the best of it."

"You hear, Jean?" asked Vliet mockingly of the girl. "Our new pilot is a philosopher."

As he spoke, Vliet let his arm drop carelessly around the girl's shoulders. It seemed to Crane that she stiffened slightly at the possessive gesture. And he saw Brad Allison, flushing, start to get up and then sink back as Jean's eyes met his imploringly.

"By the way, Crane," Vliet said casually, "you'll make your first umbron delivery for me tomorrow. Just a two-day jaunt, over to Uranus. You'll deliver the stuff in Uranopolis. Allison here will go along to show you the ropes."

Brad Allison looked up suspiciously.

"Why do I have to go along? Crane doesn't need me and I just got back from one trip."

"Nevertheless, I want you to go," Vliet said, with steel in his voice. "Crane's never flown umbron before."

Allison subsided. Jean was the first to leave the table, and the haggard young pilot followed soon after.

"Come on, Ul," Vliet said, rising and stretching his powerful arms. "We've got to check the supplies you brought in today—you can't sit there stuffing yourself all night."

When Vliet and the Saturnian were gone, big Herk Kebem broke into a guffaw of laughter.

"The boss must be getting wise to what's going on between the girl and Allison!" laughed the Jovian. "He's going to get rid of Brad for a few days."

"How could he miss seeing it?" whined Quorbos, the Uranian. "The girl and Allison have been thick ever since she came here."

Crane paid little attention to their talk. He was dismayed by the news that he must leave in the morning. That meant postponing the plan that had brought him here—or else making the attempt on this very night!

CRANE'S pulse jumped. If he could get what he wanted tonight and take off for Uranus in the morning—He decided instantly that he'd try it. If he could just find Vliet's secret safe—

"My night for guard trick," grumbled Herk Kebem as they walked out and stood yawning under the vast green bulk of Uranus.

"See that you keep awake," advised old Whitey acidly. "One of these nights when you're sleeping out your guard trick, those Greenies'll come swarming over the stockade onto us."

"Hell, they'll never bother us as long as Vliet keeps giving them pretty broken glass for that chuckle-headed stone meteor god of theirs," scoffed the big Jovian.

"Nevertheless, you keep awake," Whitey emphasized. "I got a healthy respect for the ungodly weapons them devils use."

Crane stretched out on his bunk in the dark barracks, and lay pretending sleep for two hours. There was no sound save the stirring of some other pilot, and the occasional distant, coughing grunt of some creature out in the crawling jungle.

Finally, Crane softly arose. The others lay snoring. He slipped soundlessly out of the barracks and headed toward Vliet's office, keeping within the shadows and out of the revealing green glow of the huge planet overhead.

He passed the metal shack that was Jean's quarters, and listened a moment at its door. No sound. He stole on,

and soon was at the open window of Vliet's bedroom behind the office.

Crane could hear the heavy breathing of the mine owner. Carefully, he reached in his pocket for a flat metal case. He hadn't come here without the burglar's equipment he'd figured he might need!

From the case, he took a thin glass oval capsule, and tossed it into Vliet's bedroom. He could barely hear the *pop* as it burst. Quietly, he closed the swinging window, and waited tautly.

There was still no sound. Crane slipped around to the door of the office, which he found unlocked. He entered and padded back to the bedroom, holding his breath as he entered it, and flashing a tiny needle-light onto the cot in the corner.

Vliet lay comatose, in deepest slumber. The highly condensed super-anesthetic gas in the capsule had done its work—Vliet could not awaken for hours. Crane opened the window again, to let the gas escape. Then he returned to the office.

Using the tiny ray of his needle-light, he began a quick, tense search. The desk was his first objective. He hardly expected that Vliet would keep anything very valuable in it. And he was right, for no money or records or anything else of value was in it.

Crane turned to the cupboard in the corner. Here, too, he was disappointed. There were some atom-guns, pistols and heavy rifles, and space jackets, but nothing else.

Baffled, he went back into the bedroom. Paying no heed to the unconscious sleeper, he searched thoroughly the room's scant furniture. Again, he was disappointed.

Crane began to feel black discouragement. He returned again to the office and started sounding the metal walls and floor with gentle rappings, kneeling and listening to the echo. There was no sound to indicate a hidden space.

"Hell, he must have *some* hiding place here!" Crane muttered bafflledly, rising to his knees.

A small, hard object suddenly prodded his back. From the darkness behind him a soft voice spoke quickly.

"Don't try anything! Stand up—and keep your hands away from your belt and turn around."

APPALLED, Crane slowly obeyed. He swung around, his upheld hands swiveling the tiny ray of his light. It fell on the man who covered him with an atom-pistol, on a pallid, sleepy face.

"Kruppa!" exclaimed Crane astonishedly. It was the Venusian pilot.

"I was not asleep in the barracks," Kruppa smiled. "I saw you slip out. So you're after Vliet's hoard, eh?"

"What's it to you?" Crane demanded in a harsh whisper. His mind was racing. Was the Venusian going to give the alarm?

"It's a great deal to me, for I'm after Vliet's hoard myself!" Kruppa answered coolly.

The Venusian, eying Crane, seemed to have reached a decision.

"We can't talk here. Go on out—behind the cook-shack. I'll be right behind you."

Crane obeyed bewilderedly. In the shadows behind the little metal hut, Kruppa talked softly, still holding his weapon.

"Listen, Crane," said the Venusian urgently. "I'm putting my cards on the table. I only joined this crazy crowd because I'd heard of the millions Vliet has hidden here, and decided to get them. I know now you came for the same purpose. You don't deny it?"

"Go on," Crane said tightly. "I'm listening."

"I've hunted for Vliet's hoard since I

came here," Kruppa continued, "but it's hidden so cunningly I can't find it. Now, however, I've a plan that'll make Vliet himself disclose his hiding place. But I'll need help for the getaway. You and I could swing this job perfectly together. Why not throw in with me, and we'll divide Vliet's hoard?"

CHAPTER IV

Meteor God

CRANE, thinking rapidly, looked doubtful.

"We'd divide fifty-fifty?"

"Fifty-fifty," Kruppa promised. "I give you my word on it."

Crane felt that the Venusian criminal's word was worth exactly nothing. But he hadn't been able to find Vliet's cache, himself. And if Kruppa had a plan that would find it—

"All right, count me in," Crane said decisively. "What's your plan?"

"I can't tell you it all now—we daren't talk here long," Kruppa said hastily. "But I'll tell you this—Vliet's fortune isn't in money. I learned that before I came here. It's in 'solid power'."

"Solid power?" Crane repeated.

"Solid power" was, he knew, the most super-valuable substance in the Solar System. For it wasn't really a substance at all, but compressed energy "frozen" by temporary transformation into artificial atoms.

Trillions of units of power could be compressed thus into an inch-square cube of what looked like blue-white ice. And a suitable transformer would, when desired, turn it back into almost limitless power.

"Vliet converted all his profits into 'solid power' for easier safe-keeping," Kruppa was saying. "He has at least ten cubes of it."

"Whew!" Crane whistled softly. "The stuff's worth a million Earth dollars a cube."

Kruppa shrugged. "Vliet's umbron monopoly is profitable, my friend. But you see how he could easily hide those ten cubes in some small space. Where, I don't know. But my plan will find it."

"But I'm rocketing for Uranus in the morning with Brad Allison, under Vliet's orders," Crane said anxiously.

"It'll take me two days to prepare what I need for my plan," Kruppa reassured him. "You'll be getting back by then."

Both men stiffened as they heard a heavy footstep by the main gate of the stockade, and glimpsed a dark figure moving there.

"Only Herk Kebem trying to keep awake on guard," muttered Kruppa. "But we'd better break this up. You'd better not be seen with me in the morning, either."

"Okay," Crane nodded. "I'll go back to the barracks first."

Lying on his cot in the dark, Crane's mind feverishly considered the complexities of the thing. He didn't know what Kruppa's plan was. On the other hand, Kruppa didn't know what *his* plan was.

Next morning, Kruppa gave no special attention to Crane. His sketchy breakfast over, Crane went out and found that Ul Kuil was letting the Greenies into the stockade for their day's work.

Vliet came striding up to Crane. The mine owner's face looked heavy, his eyes red-rimmed, from the anesthetic gas effects. He was quite evidently in a vile humor.

"You'll start as soon as the Greenies get the umbron in your cruiser," Vliet said harshly. "Your ship's ready?"

Crane nodded. "I saw to it yesterday afternoon."

He watched as the Greenies, under Vliet's orders, brought the heavy lead cases into the cabin of the old cruiser. The Greenies, seen thus closer, looked even more alien and unattractive to Crane—their ugly, yellow-green bodies, staring, pupil-less eyes and chittering voices giving an altogether repellent impression.

Crane opened one of the chests curiously. The umbron was simply a heap of gray rock chunks, to all appearances.

"Close that chest!" Vliet snapped. "Do you want to blow all the ship's instruments before you start?"

"The radiations of the stuff are that powerful?" Crane said incredulously. "No wonder commercial craft can't carry it."

VLIET nodded sourly. "The stuff's poison to all electrical and magnetic circuits."

The mine owner strode out, and shouted.

"Allison! Where the hell are you?"

Crane saw Brad Allison coming, with the slim figure of Jean beside him. The girl was talking earnestly, almost pleadingly, to the sullen-looking youth. Vliet's brow darkened at sight of them.

"Time to blast off," Vliet rapped. "I expect you back by tomorrow evening. And don't bring a single bottle of liquor back, Allison—I've had enough of your lying around drunk and useless."

Allison's mouth tightened but he made no answer. Crane felt a hand on his arm and turned. It was Jean.

"Will you keep an eye on Brad?" she asked him, her ordinarily defiant eyes now worried. "He's in a dangerous mood."

"Lady, I've enough to worry me without bothering about the moods of your various boy friends," he told her.

"I should have known better than to ask you," she flashed furiously.

Crane, shrugging, climbed into the cruiser. He took the pilot's seat, while Allison closed the doors.

Cyclotrons droned shakily, and Crane eyed the gauges, then slammed the throttles open. The old cruiser fairly jumped upward.

The yellow-green sphere of Umbriel dropped away fast beneath them. The uncertain drone of the cyclotrons, the thunder of tubes and the throb of oxygenators filled the ship. Crane glanced mechanically at the gravitometers, then swore startledly. They showed him only two hundred miles from Umbriel when he knew he was at least a thousand.

Allison, noting his amazement, laughed mirthlessly.

"You might as well forget those instruments," he advised. "With umbron in the ship, they don't mean a damned thing."

"So I see," Crane muttered. "Meteorometers haywire, too. It's a good thing this is just an easy hop over to Uranus."

"Wait till you find yourself trying to run a shipment of umbron through the asteroid belt, with all your instruments crazy," Allison predicted bitterly. "And Vliet'll send you, sooner or later."

Crane began to see why a day each way was allotted for the short one hundred seventy thousand-mile hop to Uranus. Flying blind as they practically were, they wouldn't dare zip in toward the planet at high speed, for deceleration would have to be by guess instead of by instrument.

Allison was moodily silent as the old cruiser throbbed ploddingly along, cutting in behind the pink globe of the inner moon, Ariel, and following a long spiral course around the vast, cloudy-green mass of the planet.

Uranopolis, biggest city of the planet, was on the dark side when Crane finally brought the cruiser down toward it.

The space port, a black blot rimmed with white lamps, rushed up toward them. Crane sweated as his fingers flashed over the throttles, his keen gray eyes peering strainedly down through the glassite.

With a crashing bump and bounce, they landed on the cement tarmac. Crane breathed a heartfelt sigh of relief.

"I'm damned if I'd want to land without instruments every day!" he exclaimed.

Brad Allison unstrapped himself and suggested, "I'll arrange for delivery of the umbron. You've earned a rest."

Crane went out and leaned against the cruiser's hot side, smoking a *rial* leaf cigarette, while Allison was gone.

Saffron-skinned, stringy Uranian officials and porters came with the proper invoices, and removed the heavy chests of umbron. But Allison still did not return. Crane finally went to bed in one of the cabin space bunks. It wouldn't be possible to start until morning anyway, with the instruments as erratic as they were.

BUT in the morning, he awoke to find Brad Allison still gone. Crane was on the point of starting toward the black towers of the Uranian metropolis to look for him, when he saw Allison coming.

Allison was stumbling and reeling as he approached the cruiser. And Crane saw the young Earthman's face was flushed deeply.

"You're drunk!" he said disgustedly.

"Sure I am," Allison answered thickly. "Vliet said not to bring a single bottle back to Umbriel—so I'm bringing a skinfull."

He snickered. Disgustedly, Crane shoved him into the ship, then closed up, started the cyclotrons, and applied himself to the ticklish business of a blind take-off without instruments.

He was relieved to get the old cruiser off Uranus without mishap. When he had got clear of the huge green planet's atmosphere and was heading back out toward the yellow disk of Umbriel, he found Allison lolling stupidly in the space chair beside him.

"Good take-off," Allison approved drunkenly. "You're a swell pilot, Crane, whatever else you are. I was a good pilot once too—till I killed my co-pilot in a quarrel and had to skip."

"I'm not interested in your past," Crane said brutally. "Drunk as you are, you're a lot of help to me on this trip."

"Oh, hell, Vliet didn't send me along to help," Allison jerked out. "He just wanted a clear field to make another play at my sister."

"Your *sister?*" Crane exclaimed, genuinely startled. "You mean that Jean—"

"Sure, she's Jean Allison, my kid sister," hiccoughed the drunken young man. "She learned I'd fled out to Umbriel and she came after me, by signing up as Vliet's rocket engineer. She's really a swell engineer, too, but Vliet wasn't thinking of that when he hired her, damn him! He'd never have brought her if he'd known she was my sister. And he's been trying to make a play for her ever since."

Crane was stupefied. "That girl came out to that hell's moon and has stayed there and fended Vliet off, just to be near you?"

"She came to persuade me to go back to Earth and give myself up," Allison admitted thickly. "Hell, I can't do that, and I've kept telling her so. How can I go back when it'll mean five years or more in prison for manslaughter?"

"Well, of all the damned worthless pups I ever heard of, you're the worst!" Crane exploded. "You let your sister

stay on that devil's moon, living with a bunch of Tenth-Worlders and trying to keep Vliet's hands off her, just because you're too weak to go back to Earth and face the music!"

"Say, you can't talk to me like that," Allison declared in thick-voiced resentment. "Who are you to preach? Just a pilot whose negligence wrecked a liner and killed six hundred passengers."

"Shut up, before I smear you," Crane said disgustedly.

Allison soon subsided into a drunken sleep. As the battered old cruiser throbbed toward Umbriel, Crane had plenty to think of.

He hadn't liked Jean Ellis—Jean Allison. He never did like these mannish girls who were becoming rocket engineers and pilots nowadays. But he had to admire her for her courage in coming to Umbriel under the disguised name to rescue her weakling brother.

Crane's thoughts swung to his own purpose on Umbriel. He wondered if Kruppa had made preparations for his plan, and wondered again what the Venusian's plan was. The man had left him entirely in the dark.

Crane brought the cruiser down toward the stockaded clearing of Vliet's Base, just as the pale sunset light washed it.

When they emerged, three of the pilots strolled up—Quorbos, Lin Tikim and the big Jovian. Jean was with them, and she uttered a little cry of dismay as she saw Allison reeling on his feet.

"Oh, Brad, you're drunk again!" she exclaimed miserably.

"S'all right," Allison said thickly, patting her shoulder. "I'm feelin' fine."

"I'll help you to the barracks—come on," the girl said anxiously, putting her arm around his shoulders as he staggered.

Allison allowed her to guide him.

QUORBOS, the stringy saffron Uranian pilot, snickered as the girl and young Earthman went away.

"Hope she'll help *me* home some time—and even tuck me in," he remarked.

"Keep your talk off her," Crane said curtly.

Quorbos stared. "So you think you're going to make a play for her too?" he whined maliciously. "She already has Vliet and Allison—"

Crane brought his right fist up in a savage uppercut that sent the Uranian sprawling. The stringy pilot scrambled up, raging.

"I'll kill you for that!" he shrieked. "I'll—"

"Cut it—here comes Vliet!" Herk Kebem said loudly.

Quorbos, glaring hate at Crane, subsided. Vliet was stalking toward them, with old Whitey trotting after to overtake him.

Crane handed Vliet a folded paper.

"Receipt for the umbron delivered. We had no trouble. Allison's gone to turn in."

"Yes, I saw him," Vliet rasped, his face black with anger. "And I—"

Old Whitey reached the group at this moment. The veteran Earthman pilot's leathery face was worried.

"Kruppa went out into the jungle and hasn't come back yet—said he was going over to the Greenie village," Whitey told Vliet anxiously. "And it's almost time to lock up the stockade."

Vliet swore viciously. "Damn Kruppa! I've told you all to let the Greenies alone. Whitey, you and Crane go after him."

Crane hurried with the old Earthman across the base to the stockade gate. In the sunset, the Greenies who had been digging in the workings under Ul Kuil's supervision were now laying down their tools.

"Crazy Venusian has no business

poking around outside the stockade this late," Whitey was muttering. "If he's had trouble—"

They had entered the jungle. It was a solid mass around them, growing darker by the minute, with the weird green glow of Uranus sifting down between the flat fronds of the bigger trees and the crawling, creepy rootless lianas and shrubs.

Luminous insects swarmed around them, and moon-pigs coughed and grunted nearby. They were following a vague Greenie path that ran westward. Whitey stopped suddenly to detour carefully around a rotted trunk, upon the side of which hung two things like bulging white pods.

"Blood-fungi," grated the old man to Crane. "Don't touch 'em—they're the most horrible way you can die, if you break one."

Then Whitey raised his voice in an echoing call.

"Kruppa! Where the devil are you?"

Crane sensed something tense, foreboding, about this darkening jungle. Or was it just that his nerves were harpstring taut?

"Kruppa!" yelled Whitey again. This time came a distant answer.

They pressed forward, and entered a little glade in the jungle. The green glow of Uranus illuminated it. A huge, grotesque object towered at its center, and Kruppa was coming toward them from that point.

"What the devil are you doing here, fooling around the Greenies' god?" Whitey demanded of the Venusian. "You know Vliet don't allow that."

"I just wanted to see this meteor god you others talked about," Kruppa replied. "Queer-looking old thing, isn't it?"

Crane stared. The looming object was a meteorite, half buried in the ground. It had accidentally the shape of a grotesque, gargoyle head—a monstrous head, inclined drunkenly forward.

All around this strange visitant from the sky lay bright stones, pieces of glittering minerals, and a great many chunks of ordinary broken glass that were brilliant in the green glow from Uranus.

"The Greenies have worked months for Vliet to get all that broken glass to put here—think of it!" laughed Kruppa.

"We'd better get back to Base," rapped Whitey. "And you'd better not let Vliet know you were out here."

AS they hurried back to the stockade, Crane sensed a suppressed excitement in the Venusian's manner. Kruppa kept glancing back over his shoulder constantly. Crane had no chance to talk to him.

Complete night had fallen as they hastened into the stockade. Ul Kuil was just letting the Greenies out. Each of the chittering creatures clutched his wages for the day—a scrap of shattered glass.

The fat Saturnian and Whitey swung the steel stockade door shut and locked it. It gave Crane a chance to whisper to Kruppa.

"Your plan?" Crane asked swiftly. "Your scheme to find Vliet's cache—have you worked it out yet?"

"No time to tell you now," Kruppa muttered rapidly. There was perspiration on his forehead, an almost fearful look in his eyes, as he added,

"I've got everything set. Get ready—for hell is going to break loose here!"

"Crane! I want you!" bellowed Vliet from the office.

Crane strode toward the building. Had Vliet discovered Kruppa's plan? What *was* that plan? What was going to happen?

CHAPTER V

Attacked

CRANE found Vliet standing in front of the office, his powerful figure towering dark in the green light, his face grim.

"Crane, I found these in my bedroom this morning," Vliet said harshly. "I *thought* I'd slept a little too heavily last night."

The mine owner held out his hand. In it were tiny flakes of glass—fragments of the anesthetic gas capsule Crane had used.

Crane's heart jumped, but he kept his face calm and said coolly,

"Well, what has that to do with me?"

"I found a case containing other gas capsules in your jacket just now, while you were gone with Whitey," said Vliet grimly. "You were in my quarters last night, snooping around, weren't you? Yes, and I know just *what* you were snooping for, Mr. Crane."

The other pilots were gathering, amazedly listening. Jean was among them, her clear face frowning puzzledly at Crane.

"I suppose you think I've been rummaging to find the hoard of millions you're supposed to have," Crane sneered.

Vliet shook his dark head grimly.

"No, Crane—I know you're not after my money. You're after my *records*. You want to know whether or not I made a certain shipment of umbron from Uranus six months ago."

For a moment, Crane couldn't believe his ears. How could Vliet have discovered what he, Jimmy Crane, had come to Umbriel for? He'd planned every step so carefully, he'd thrown himself in the way of Ul Kuil on Mars to be offered a job on Umbriel, just to get here without arousing suspicion. And Vliet had known all the time!

"You know?" Crane gasped unbelievingly to the mine owner.

Vliet nodded sardonically. "I've known just what's in your scheming little brain since you came here. You believed that your space liner ran into that meteor swarm six months ago, not because you computed the course wrongly as you were accused of doing, but because there was umbron aboard whose radiations made the instruments erratic. You figured that out from some clue, and thought you'd come out here and get hold of my records and prove it, and so clear yourself, eh?"

Vliet laughed harshly. "Why, you clumsy fool, I knew as soon as I saw you what you were here for. And I can tell you that you won't find any such record or evidence as you're after. But you can stay here and keep trying to find it, for I need pilots and I'm not one damned little bit afraid of anything such fools as you can do against me."

Crane's stupefaction had passed. A cold, deadly feeling such as he had never before experienced now possessed him.

"Vliet, you've as good as admitted that you *did* ship umbron on the *Vulcan,*" he rasped. "I've found out from the others here that six months ago, you were short of pilots. You had to make a delivery of umbron to Mars, so you took the stuff to Uranopolis and smuggled it onto my liner. You caused that wreck, and you're going to confess it publicly!"

"Don't be ridiculous," Vliet scoffed. Then, seeing the deadly look in Crane's eyes, he flashed out his atom-pistol. "I don't want to kill you, Crane! I need pilots. But if you force me—"

"Jimmy Crane! Don't!" cried Jean sharply.

Crane was deaf to her appeal. Through the red mists of hate he could

only see Vliet's face, as he crouched to spring—

Boom! The rocking detonation came through the night from the green-lit jungle westward. A moment later, it was followed by a distant uproar of chittering screams, rising to a raging chorus.

"That was an explosion!" Vliet cried, stiffening. He turned, black eyes flaring. "Kruppa, you were out in that jungle tonight. What—"

"Boss, listen!" old Whitey cried frantically. "Those are the Greenies' war-pipes!"

A skirling, screeching wail was now rising out of the planet-lit jungle, a sound whose weirdness made the hair bristle.

UL KUIL'S teeth chattered. "Whitey's right—those are their war-pipes starting!" the fat Saturnian babbled. "Remember, we heard them before when the Greenie tribes were fighting!"

"This may only be another tribal battle," Vliet said harshly. "But that explosion—"

He suddenly boomed commands. "Ul, turn the current into the stockade! Whitey, break out the atom-guns and the masks! Hurry!"

Dynamos in the work-shack started droning as Ul Kuil turned a lethal current into the steel stockade. Whitey came tumbling back from the supply shack with heavy atom-rifles and light face masks.

"Masks on, everybody—if they come, they'll use the blood-fungi!" Vliet boomed. "Positions as follows: Ul and I will cover the west wall and gate from my office; Whitey and Herk Kebem watch the north wall from the cook-shack; Kruppa and Crane cover the east side from the barracks; and Lin Tikim and Quorbos hold the south side from the work-shack. Jean, you'd better stay with me," he added curtly.

"No, I'm going to my brother!" she flashed, and sped to the barracks.

"Brother? Allison?" Vliet repeated. Then he laughed harshly. "This seems to be a night for finding out things. Get going!"

The towering mine owner had completely ignored Crane except to bark his orders. And Crane, even in his white-hot passion, realized that in this possible peril, his own vengeance must wait.

He ran with Kruppa toward the barracks.

"Mask on!" the Venusian cried through the respirator of his own mask. "You've never seen a man hit by that fungi-death!"

Crane jabbed the mask over his face. He and Kruppa gained the barracks, crouched with their heavy atom-guns inside its door, watching the east wall of the green-lit compound. He could hear Jean trying to awaken her brother, could hear Allison's half-drunken muttering.

The screeching, nerve-rasping wail of the Greenie pipes stopped suddenly. The silence rushed back over everything.

"Maybe they're not coming to attack us at all," Crane said hopefully.

Kruppa laughed mirthlessly. "They're coming, my friend, you can rely on it. You see, I slipped an atomic time-bomb under their god."

"Then *that* was the explosion!" Crane gasped. He was thunder-struck. "You fool, why did you do that? Do you realize you've set the Greenies now to destroying this whole Base?"

"Sure, that's been my plan," Kruppa retorted coolly. "My plan to find Vliet's treasure cache."

The Venusian's pallid face was feverish with excitement.

"The Greenies'll besiege us here.

They'll never work for Vliet again, and he knows it. What'll happen? Why, Vliet'll decide to get away from this moon with his hoard. He's no coward, but he's a ruthless realist. He'll bring out his treasure of 'solid power' and start to leave. And when he does, I'll take his treasure away from him, and beat it. Clever, isn't it?"

"You murderous idiot!" Crane blazed. "To get your hands on Vliet's millions, you've imperilled the life of everyone here."

"Sure—so what?" Kruppa countered nonchalantly. "You've got to run risks for high stakes. And we can all get away in the cruisers."

Then the Venusian laughed. "But I forgot what we just found out—that you're here after Vliet's records, after evidence to clear your own record. All the better—I won't need to share with you."

"There they come!" bellowed Herk Kebem's voice from across the compound.

Greenies were spilling out of the jungle, racing across the narrow clear ground to the stockade on all sides. Crane sighted at one of the ocher creatures in the lead, pressed the firing button of his atom-gun, saw the Greenie fall as the thin, crashing bolt of atomic fire streaked and struck.

KRUPPA was firing coolly and deliberately beside him, and between every shot, the Venusian glanced back across the compound toward the office from which Vliet and Ul Kuil were covering the west wall. He was obviously waiting for Vliet to start his flight.

A screaming chorus of raging, chittering voices mingled with the crackling crash of the atom-guns. Then Crane saw the foremost Greenies reach the stockade, and hammer at its gate. As they touched it, they fell writhing.

"Current's got 'em!" Vliet's voice boomed muffledly. "Hold your fire."

"Here come the fungi!" yelled Whitey's voice desperately.

Crane saw that the Greenies had recoiled from the deadly steel fence. Now many of them were whirling what looked like crude slings. Pod-like white objects came sailing into the compound.

They were the spore cases of the so-called blood-fungi which Crane had seen in the jungle. He saw them smash inside the compound, emitting clouds of fine, floating white spores.

"Keep your mask on, for God's sake!" Kruppa muttered.

Crane turned momentarily, saw that Jean had been putting a mask onto her drunken, unconscious brother. She came to his side.

"Try to get those Greenies!" Vliet's yell ordered.

The atom-guns began to crackle again, this time in irregular rhythm. Crane, crouching, could hardly discern the Greenies against the yellow-green tangle of the jungle, in the weird green Uranian light.

Then he saw what he thought was an arm whirling. He fired. The streak of fire from his weapon brought a distant scream of agony. He fired at another slinger, missed. More fungi-pods were breaking in the compound. The air seemed full of floating white dust.

Through the rattling crackle of atom-guns, Crane heard Vliet's harsh yell.

"Ul, come back here!"

Ul Kuil had run out of the office, and the fat Saturnian was stumbling in a waddling run toward the nearby cruisers.

"I'm not going to stay here and die that way!" came the Saturnian's muffled, panicky scream from under his mask. "I'm going—"

"My God!" Kruppa breathed.

For Ul Kuil, fleeing in panicky,

clumsy haste toward the cruisers, had tripped and fallen heavily. The mask flew from his face.

"Don't look!" Kruppa cried in horror to Jean. "Don't watch—"

The Venusian swung the girl around so she couldn't see. Next moment Crane, retching with horror, wished he had turned also, as he saw the ghastly thing that in the space of seconds befell Ul Kuil.

The stout Saturnian, scrambling to replace his mask, suddenly stopped and clutched his stomach. A terrible expression of anguish contorted his moon face—he uttered a hideous howl of agony.

He fell, writhing. And Crane saw the Saturnian's stout body swiftly *swelling*, puffing out bloatedly like a balloon being blown up. It became monstrous, incredible in size. And it *burst*, and from within it exploded a billowy mass of the swiftly reproducing white fungi.

"Fungi-death," Kruppa said, his voice hoarse and shaky. "You know now what happens if those fungi-spores get inside your body by nose or mouth, Crane. They batten and multiply on blood and tissue, and devour the whole interior of your body in two minutes!"

"God!" breathed Crane. "Why don't the spores affect the Greenies?"

"They're apparently immune through adaptation," Kruppa jerked. "But they know from past experience that we are not immune."

Crane found Brad Allison at his side. The young Earthman was staring dazedly through his mask eyeholes.

"What is it? Attack?"

"Get those devils with the tree!" rang Jan Vliet's yell.

OUT of the jungle through the greenish dusk had rushed a mass of Greenies bearing an immense dead tree trunk, heading straight toward the gate in the west wall of the stockade.

Crane and Kruppa fired together. Streaks of white atomic fire blazed then from every one of the defended buildings. The terrific volley cut through the barred steel gate and scythed down the onrushing Greenies.

But even as they fell, the massive tree trunk they carried had crashed into the gate. It shattered, hung like a broken jaw from one hinge. With skirling screeches, the Greenie horde rushed toward it.

Vliet's powerful figure leaped toward it.

"Come on! We've got to close that gate! Once they get in here and tear the masks off us, we're done!"

Crane and Kruppa plunged after Vliet and Whitey and the others. Crane heard Jean's sharp cry, and was aware that Brad Allison had snatched her atom-gun from her and was running with them.

They shot as they ran, into the insurging Greenie mass. The current in the steel fence was broken by the shattering of the gate. The Greenies were already flowing through the opening.

Crane felt his gun hot in his hands as he shot from the hip. The Greenies were but a few yards away, charging blood-mad, going down in dozens, but still coming on.

Crane's gun went dead, its atomic charge exhausted. He clubbed the heavy weapon as a howling Greenie leaped at him from the right. He glimpsed the glaring, pupil-less eyes in the hideous face—and then sent the gun butt smashing down onto the conical head.

Rubbery arms gripped Crane from behind, and a yellow hand snatched at his mask. Thought of what it would mean to lose the mask, in this cloud of floating fungi-dust, nerved Crane to convulsive strength as he drove his el-

bows back and shook the Greenie loose. He whirled around with a fierce muffled yell, and the barrel of his atom-gun caught the creature's face and pulped it.

Two more Greenies leaped out of the howling mêlée toward Crane. One of them crumpled in mid-air as somebody's shot sent a fire-streak through his body. Crane desperately sidestepped the other's leap, and as the Greenie hit the ground, the Earthman furiously clubbed him down with his gun butt.

Sweating, half blinded and almost suffocated beneath his mask, Crane heard a yell of agony so intense and awful that it knifed even through the unholy din.

It was Quorbos, the Uranian, who screamed. His mask had been twitched off, and the man was falling in torment, his body swelling up horribly, and in a moment exploding into a billowy white mass.

Crane felt sick but he managed to grab up the Uranian's gun. It still had some charge, and he felt the kick of it in his hand as he pressed its button and scythed a fire-streak across the now-recoiling Greenies.

"They're giving way!" he yelled hoarsely. "Push 'em back!"

The Greenies broke and ran toward the jungle. And Crane shouted to the other staggering men.

"Quick, fix the gate up! Get clamps, Whitey—hurry!"

They labored to repair the shattered gate. Fungi-pods burst among them as the Greenies in the jungle howled like demons.

Crane heard Kruppa utter a fierce exclamation.

"Look! While we've been fighting, Vliet's been making ready to pull out!"

Crane turned and saw. Vliet, a small metal case in his hand, was just vanishing into his own cruiser at the head of the line of parked ships.

"He's realized it's hopeless and is going to take off with his 'solid power' hoard!" Kruppa snapped, eyes glittering. "What he doesn't know is that I sabotaged his cruiser so he can't leave!"

AND, drawing an atom-pistol from inside his jacket, the Venusian bounded toward the cruiser into which Vliet had gone.

"Kruppa, come back!" Crane yelled. "We've got to fix this gate!"

But the Venusian paid no heed. Crane, laboring furiously, found Jean Allison beside him, working deftly to affix the clamps.

"This is no place for you—get the hell back into the barracks!" he cried to her.

"I told you that you couldn't talk to *me* like that!" she bristled. "Hand me that other clamp!"

In a few minutes, they had the gate shakily repaired. Crane saw that Whitey and young Allison, and Lin Tikim and the big Jovian, though battered by battle were not seriously hurt.

"Jean, get fresh guns from the supply shack!" Crane snapped. And as she ran to obey, Crane himself headed toward the cruiser inside which Kruppa had followed Vliet.

He found Vliet lying, choking blood, a hole burned through his chest. And Kruppa stood, atom-pistol still in his hand, gloating over an opened metal case in which lay a dozen small, translucent, blue-white cubes of the fabulously valuable "solid power."

"I've got it and I'm getting out of here in one of the cruisers!" Kruppa exclaimed. "You'd all better take off in the others if you want to save your necks."

"You fool, why did you shoot him!"

Crane blazed. "He was the one chance I had of clearing my record."

Kruppa laughed dangerously. "His life means no more to me than your precious record. Get out of the way—I'm leaving!"

Jan Vliet sat up, with an agonized effort. The big mine owner's dark face was bloodless around his mask, and he clutched his wounded breast as he spoke gaspingly to the Venusian.

"You're not going, Kruppa—you're going to die here," Vliet choked. "I figured it was you who caused that explosion and aroused the Greenies. And—I determined you weren't going to get away alive, even though everyone else here had to die."

"What did you do?" Kruppa cried, suddenly tense.

Vliet laughed weakly. "I sabotaged every ship here except this one, before I started to leave—ran through the cruisers just now and fired a blast into the cyclotrons of each one."

"Gods of Venus!" Kruppa whispered, appalledly. "And *I* had previously crippled this ship so you couldn't get away."

Vliet laughed again, more weakly, but triumphantly, the hard, ruthless spirit of the man blazing as his life flickered low.

"Yes—it works out nicely, doesn't it? None of us can get away from here now. The Greenies will get you, Kruppa—they'll get you and everybody else here!"

CHAPTER VI

Last Stand

CRANE was appalled. "It'll take days to repair the ships," he breathed. "We'll have to hold the Greenies off—"

"You can't do it," Vliet chuckled weakly. "There aren't enough atom-guns."

"Damn you, I'll finish *you* now!" swore Kruppa, ragingly, aiming his atom-pistol at the fatally wounded mine owner.

Crane struck his arm up. "None of that! You've got us in a bad enough mess, you and your clever schemes!"

Jean Allison came hurrying into the cruiser. The girl looked horrifiedly at Vliet's ghastly appearance, and then turned urgently to Crane.

"I could only find two fully charged atom-guns!" she cried. "We can't hold the Greenies back long with them—they'll come through onto us in their next rush."

Crane was staring at the little blue-white, translucent cubes in the case Kruppa held—the precious "solid power."

"We've just one chance—that 'solid power'," Crane said rapidly. "There's power enough in each of those cubes to make a blast that will destroy a million Greenies."

"But we haven't any transformer to convert the cubes back into energy!" Jean objected.

"We'll have to make one," Crane rapped. "The transformers used are simple enough—I've worked with them in ships that used 'solid power' fuel. We can make one from the dynamo equipment in the work-shack—and we've got to do it somehow before the Greenies rush us again."

"But you know the transformers require pounds and pounds of carbon, as an inhibiting element, a chemical 'governor' to keep the energy being released too fast," Jean reminded him. "Without carbon, your transformer would in five minutes blow itself out in a terrific energy explosion. And where can we get that much carbon here?"

"We've got to get it somehow!"

Crane declared, his voice raw. "Kruppa, get Whitey and rummage every building here for carbon—every ounce of it, even to lead pencils! And remember that your life depends on it now!"

Kruppa, thoroughly understanding the dire emergency, raced out of the ship. Crane bent and tried to bandage the ghastly fire-scorched wound in Vliet's breast.

"Shouldn't be wasting time—he's a goner anyway," Crane muttered. "But I wouldn't let a dog die without any care at all."

Vliet, opening his eyes, jeered weakly.

"You're a soft sentimentalist, Crane. If our positions were reversed, I'd let you die and be damned to you."

"I don't doubt it," Crane said between his teeth.

He and Jean raced toward the workshack. He inspected the dynamos and other atomic electrical machinery with hasty glances.

"Stuff enough here to make a transformer," he declared. "If we just had more time!"

"You're not saving any time by talking about it," snapped Jean. "Come on and get to work. I've worked with 'solid power' converters, and the chances are I know more about them than you do. You tear down that dynamo first."

Crane found himself working with the girl in a tense, frantic urgency. There was silence except for the clang of tools and the occasional monosyllables they exchanged.

Sweat ran down his face inside his mask. Jean's crisp blond hair was disordered, her chin smudged with oil. Crane realized almost at once that the girl engineer did know more about the task than he, and followed her orders. This was no time to assert masculine pride. And somehow it would have been very foolish indeed to do it.

NOW and again as he worked, he cast a feverish glance out into the compound. He could see, out there beneath the huge green planet's glow, Herk Ebem and Lin Tikim and young Allison watching around the stockade walls. He could hear the Greenies uttering their chittering cries back in the brooding jungle.

"We can sweep the whole east wall of the stockade, and the whole jungle beyond, with a terrific power blast from here," Jean panted. "*If* they don't attack before we're finished."

"We're almost through now," Crane grunted, his hopes soaring as he fumbled to make connections. "Five more minutes—"

The thing they had partially built resembled outwardly a stocky pump whose spout pointed toward the stockade, and atop which was a broad, round hopper for the supply of carbon required as chemical 'governor' of the process.

Inside this pump-like object was the hastily assembled electrical apparatus which started the disintegration of "solid power" back into pure energy, by smashing one of its artificial pseudo-atoms, the process being self-continuing thenceforward until damped out.

"We've almost got it!" Crane exulted breathlessly. "And here come Whitey and Kruppa with the carbon—"

But Kruppa's face was pallid with panic as he rushed in.

"There *is* no carbon here in the compound in any quantity!" the Venusian babbled. "We could find only a few odd ounces."

Crane was aghast. "Whitey, you know this place well! Where can we get carbon in quantity?"

Whitey shook his head. "There just isn't any here in the compound, lad."

A cold, deadly sensation of defeat invaded Crane's heart.

"Then we're licked," he said hoarsely. "We've got the transformer ready and rigged to a power blast that could scythe the Greenies out of existence when they attack. But that power blast would run for just five minutes before it blew us all sky-high, for lack of the carbon 'governor'."

Jean's eyes flashed. "Jimmy, I've an idea!" she cried. "You get a power cube ready in the chamber."

Before Crane could question her, the girl dashed out of the work-shack. Hopelessly, Crane took one of the little blue-white cubes of solidified energy and placed it in the power chamber of their improvised transformer.

Whitey cried out, from the door. "Good God, she's opening the stockade gate—she's going out!"

Crane, appalled, jumped to the door. Jean had opened the stockade gate and was calmly *walking* out toward the jungle.

The insanity of her act stupefied him. He saw the Greenies breaking from their jungle cover all around the compound, and racing with weird howls toward the girl.

"She must have done it so we could escape out the back of the stockade!" Kruppa cried. "I'm going—come on!"

The Venusian darted out of the work-shack. But neither Whitey nor Crane, petrified by horror, followed him.

"Nothin' can save her from the devils!" groaned the old man.

Jean had stopped advancing outside the stockade, had turned and was running back through the open gate, with a crowd of hundreds of the green aborigines close behind her.

Crane jumped back to the transformer.

"Stand aside, Whitey!" he yelled, reaching for the switches. "I'm going to use the power blast on those devils!"

"But you said that without the carbon it would let go on us—" Whitey started to object.

"It will—but we'll go with Jean before we let them get her!" Crane cried, his face crimson. His hand slammed the switch. He yelled out in a great voice, "Out of the way, Jean!"

JEAN seemed to hear him. She darted aside from between Crane and the mass of charging Greenies.

The transformer Crane crouched over was groaning, rocking wildly, as the power cube started to break down into energy. Crane depressed the blast lever —and out of the blunt spout there leaped a dazzling and awful sword of living white fire, a terrific beam of blazing energy that struck the Greenie mass squarely.

The Greenies were withered and shriveled and blackened remnants, where that blast hit them—incinerated by its awful force. Crane played it back and forth, trying to halt the onrushing masses behind.

The transformer was rocking more wildly on its base, threatening to tear itself apart by vibration as the ungoverned conversion of the cube inside it into pure energy accelerated.

"Oh, Lord, it's going to let go!" Whitey choked. "This is the end of *our* rocket trail—"

Crane's mind was a roaring chaos. He knew any minute would see the whole tremendous power in the cube blaze forth, to blast the whole compound from the face of the moon.

Then he saw that Jean was running back toward him. She had called Lin Tikim and the others, and they had all snatched up the blackened, cinderized bodies of the slain Greenies, and were running with those masses of horrible remnants toward the work-shack.

"Back!" Crane yelled at them. "This thing is going to give way—"

But Jean and the others came on. They burst into the work-shack and dumped the cinderized bodies they carried into the big hopper of the shaking, roaring transformer.

"Carbon!" Jean yelled to Crane. "The carbon in the Greenies' bodies—it's enough to keep the power flow under control!"

In a flash Crane understood. Carbon was a major constituent of every living thing. And the incinerated bodies of the Greenies, carbonized by the awful blast, were pure enough carbon to serve.

THE transformer's terrific rocking and roaring was lessening. The flow of power from the cube was being controlled. And a steady blaze of energy kept blasting from it, scything down the Greenies in and outside the stockade, searing far into the jungle itself and cutting through the vegetation like a flaming sword.

The Greenies, those of them who had not been in the path of the blast, turned and fled. Their chittering cries of panic receded rapidly through the jungle.

Crane shut off the transformer with an unsteady hand. And as the blast died, he turned shakily.

"That's done it!" Whitey was whooping exultantly. "They won't dare attack us again—and even if they did, we could mow 'em down. We've got all the time we need to repair the ships now."

"Jean, you went out there and drew the Greenies in, on purpose!" Crane said unsteadily. "For all you knew, I might have taken the chance to escape out the back, as Kruppa did—"

"Kruppa didn't escape!" Whitey interrupted. "He's lying out there behind the ships, by the back of the stockade."

"Then the Greenies must have got him," Crane said. "Come on—"

The fungi-spores had dissipated and they took their masks off.

But when they reached the prostrate Venusian, they found that he had been slain by an atom-pistol whose blast had drilled his back. And Crane, looking up wonderingly, saw that Jan Vliet lay sprawled half out the door of his cruiser, an atom-pistol still gripped in his hand.

Vliet was still living when they reached his limp form. But the mine owner's voice was a weak whisper, his scornful black eyes now dim and shadowy, as he spoke.

"Yes—I got Kruppa," he chuckled feebly. "Had an atom-gun in my ship here and watched for him. Knew I couldn't die till I'd settled with him. Thanks for helping me live that long, Crane!"

VLIET coughed chokingly, then whispered,

"For doing that for me, Crane, I'll tell you something. In my secret compartment in the north wall of the barracks—where I kept my wealth right under all your noses—you'll find my records. They'll prove I shipped the umbron on your liner and caused the wreck. Will clear your record—"

Crane was strangely moved. "What about your power cubes, Vliet? They're worth millions."

Vliet tried to laugh. "What—the hell—do I care—about millions—now—"

He was dead as the last whispered word left his lips. Crane looked up at the others, Lin Tikim, Whitey, the big Jovian, young Allison.

"You fellows helped earn that money for Vliet," Crane said. "I think you're entitled to one of those cubes apiece. Each is a fortune, you know—they'll make it easier for you, even though you can't go back to your own worlds."

"I'm going back," young Allison declared shakily. "The danger I got Jean

into here—it's been enough for me. I'm going to Earth and face the music. Five years won't be so long."

"Brad!" cried Jean, her blue eyes tremulous with gladness. She swung toward Crane. "I'm glad too—about your record—"

"The credit's all yours," Crane declared. "If you hadn't thought up that ruse to draw the Greenies in and use them for carbon, we'd all be atoms by now. And you took that risk, not knowing whether or not I'd really use the blast or try to escape like Kruppa."

Jean looked scornfully at him. "Of course I knew you'd turn on the blast! I knew you'd be willing to be blown up with me if you couldn't save me, when you're so much in love with me."

"In love with you?" Crane cried stupefiedly.

Jean nodded her head coolly. "Of course you are. You have been since we first met. That's why you were so angry with me when you thought I was Vliet's girl friend."

"Why, you're crazy—" Crane started to stammer. Then his jaw dropped, he looked ludricrously amazed, as he stared at her. "Good Lord, maybe you're right. I'll soon find out—"

He grabbed her and kissed her soundly. When he raised his head, he groaned,

"Damn it, you *are* right—I'm nuts about you. Why did you have to go tell me?"

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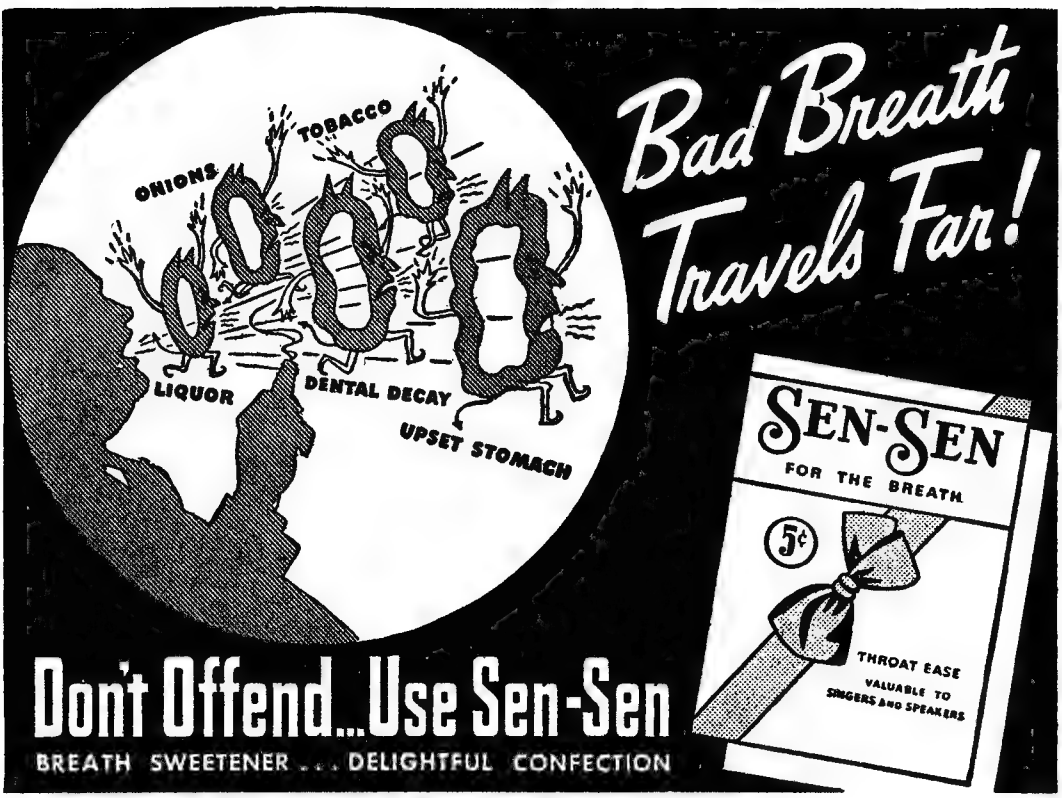

The Scientific

TIME was no barrier to Lancelot Biggs when he found out Horsesense Hank alone could solve his problem

Before their eyes a strange figure materialized. It was Lancelot Biggs—out of the future!

Pioneer Returns

by Nelson S. Bond

THIS sounds silly. At half past three on a Tuesday afternoon, in broad daylight, Professor Hallowell of the Midland University physics department left Jurnegan Hall, walked down a campus path clogged to the gutters with students—and disappeared into thin air.

This sounds even sillier. At nine-fifteen the next Friday morning, Travis Tomkins, chief technician of Midland's new observatory, stepped to the platform of Old Main to speak before an attentive crowd of twelve hundred undergraduates—and vanished before their eyes!

But this sounds silliest. H. Logan MacDowell, fat, fifty, feverish, and

president of our institute of (alleged) learning, came to *me* about it! He came on the run. That is, he came at a brisk, lurching shamble. Which is, to him, the equivalent of a Cunningham four-minute mile. He collapsed on my studio couch, gasped and panted like the White King for a minute, then wheezed out a strangled plea.

"Blakeson, you—you've got to do something!"

I looked at his gaping mouth and bulging eyes, and nodded.

"Right!" I remembered. "I've got to rewind my bass rod and see that the reel is oiled. They'll be running in a week or so."

"No, you impertinent young snippet! I mean, you've got to do something about these mysterious disappearances."

I laughed right out loud. I bared my arms frankly.

I said, "Grab a look, Prexy! Nothing up the right sleeve; nothing up the left sleeve. I didn't snatch your pedagogues. After all, just because certain members of the faculty find it expedient to take a powder—"

"A what?"

"Powder," I repeated. "Can't you understand plain English? To lift one's feet. Scram. Blow. Take it on the lam. Sweet whistleberries, Doc, I'm not something from the 'FOLLOW THAT MAN!' advertisements. I'm just the publicity expert for this football-team-with-a-campus. If you want to learn what happened to Hallowell and Tomkins, why don't you get a dick?"

His jowls sagged to his breastbone. He said in an anguished tone,

"I suppose that means a detective? I did hire one."

"Well? And what did he find out? Aside from the well-known facts that Hallowell was carrying the torch for a red-headed senior, and Tomkins was up to his zipper in debt? Did he dig up any clues? Footprints? Blunt instruments, or ashes with rare cigarettes dangling on the end of them?"

"He didn't," said H. Logan in a hollow voice, "find anything, Blakeson. *He* disappeared, too!"

I SAID, "Oh-oh!" Which was inadequate, but it was all I could think of at the moment. "That's bad. It must be contagious. But where do I fit into the picture? Why ask me to do something?"

H. Logan wrestled with his scruples for a long and difficult moment. Then, suddenly,

"Cleaver!" he blurted. "Where is that man?"

Merely saying the name cost him an effort. And why not? Hank Cleaver was the one soul whose amiable meanderings, crossing the life-path of H. Logan MacDowell, had interrupted the smooth flow of traffic along that broad highway, torn up the roadbed, and sprinkled tar and gravel along the right-of-way.

The common-sense genius of Hank Cleaver had made MacDowell look like a cross between a baboon and a stuffed shirt, with the baboon getting the worst of the bargain.

Then, to cap the climax, Hank had handed Prexy's daughter the jilt, leaving sweet Helen high and dry at the altar when he returned to his beloved cabbage patch on his farm.

To say that MacDowell was unfond of Cleaver would be like saying that nice people disapprove of *Herr* Hitler.

About the campus it was commonly rumored that the president of Midland had a little China doll into which, each midnight, he jabbed many red hot needles.

The plaything wore coveralls and bulldog shoes, just like Hank Cleaver!

I said, "So you're going to call in 'Horse-sense' Hank."*

"Don't talk about him!" growled MacDowell savagely. "Find him! If we don't solve this mystery soon, we're going to have F.B.I. men romping all over our campus. The reputation of glorious Midland will be ruined. Our noble banners, heretofore untouched by the faintest breath of scandal—"

"Okay!" I said hastily. "Save that for the Alumni Banquet. I'll see what I can do, Doc."

He left, making noises like a sizzling steak. And I got on the phone.

But the results were strictly stinko. I grabbed a blank on my first call. The local operator at Westville intoned,

"No, puh-lease! Sor-ree, puh-lease! There is no telephone listed under the name of 'Gleeber'—"

"Back up," I snorted, "and start over. Look, Sis! 'C' as in cuckoo; 'l' as in lunkhead, 'e' as in—"

"Oh, is that you, Mr. Blakeson?" she chirruped. "I knew you by the description." Ouch! "I'm sorry I can't connect you with Mr. Cleaver. Do you want to talk to Mr. Hawkins?"

"Yeah," I said. "Gimme."

Hawkins was the amateur star-gazer working in Westville as a lay member of the Midland observatory staff. He owed his reputation to Hank and his income to me.

But he turned out to be a perfect bust, and I don't mean the Venus de Milo.

He said, "Hank Cleaver? No, Jim, I haven't seen him for—oh, several days. I don't know where he is. But why do you want him? What's the matter? Is anything wrong?"

"Is anything," I countered, "right? Look, Hawkins, take a run out to his farm. Find Hank and tell him I've got to see him immedi— Who's there?"

"Nobody," said Hawkins querulously, "but our party-line subscribers. They're always listening in. What's ailing you, Jim?"

"I wasn't talking to you. There's somebody at the door of my apartment. Who's there?" I bawled again.

No answer. So I said to Hawkins,

"Well—do what I say. Find Cleaver. Tell him I've got to see him immediately, if not sooner. And let me know the minute you find him. So long—Oh, *wait* a minute, can't you?"

I hung up and stormed to the door, my foot itching to bury itself in the southern exposure of a salesman facing north. I flung it open, yelled,

"No, I don't want some! Go peddle your damn junk somewhere else—"

And then my jaw hit the top button of my vest.

"Hank!"

"Hyah, Jim!" said Horse-sense Hank.

BIG as life and twice as natural. There's only one Horse-sense Hank Cleaver. When they poured him, they laughed so hard they dropped the mold and broke it. Tall and gangly, so thin of cheek that the cud which constantly caresses his bicuspids sticks out like a cue-ball; tow-colored ravelings of hair waving experimentally in all directions; raw-boned of wrist; eyes mild and incurious as those of a heifer—that is my pal, Hank Cleaver.

I clapped him on the back and dragged him, by main force, into my apartment.

"Golly, guy, I'm glad to see you!

*Horse-sense Hank Cleaver, one of the best-known characters in modern science fiction. Hank, a dirt farmer never subjected to education, has an amazing ability to fix things of a mechanical nature when they go wrong, make infinitely accurate mathematical calculations and, above all, foretell the future in his own homely and intimate fashion.—Ed.

You're looking a million. Do you know, I've been slaving like a census-taker to find you? I've called Westville, and—"

"I figgered," said Hank mildly, "as how you might be."

The wind whooshed out of my sails.

"You," I gulped, "did?"

"Mmm-hmm. Heard a feller say as how there'd been funny goin's-on down thisaway. Thought to myself, 'Well, now, Hank, 'pears like fust thing you know, ol' Jim'll be needin' a mite o' help, so you better hump along an' give him a lift.' So I come, and—" He beamed. "Here I am!"

"Yes," I said weakly. "Here you are."

Dammit, I don't know why I should have been surprised. Especially after having lived under the same roof as this gawky genius for three solid months. But as ever, it utterly confounded me to realize that Hank's thought processes were so simple, so altogether down-to-earth and natural, that he invariably did the right thing at the right time.

I said, "And a mighty good thing you came, too. But your turnips, Hank? How—"

He shook his head dolefully. Turnip growing was Hank's one and only obsession.

"Turnips," he grimaced, "is hell. It don't matter how you plant 'em, or where, or when, or what you do—they don't never act like you'd expect 'em to. I plant 'em wide, I plant 'em close; I plant 'em in cuts an' slips an' seeds; I plant 'em yeller, white an' mottled. I water 'em an' potash 'em an' treat 'em like babies—an' I *still* can't make 'em behave!"

He wedged a bulldog-tipped toe into the rug and looked at me from under his bushy brows.

"Helen?" he asked. "How's Helen?"

"Iroquois!" I told him grimly.

"Come again?"

"After your scalp. Didn't you ever hear the adage about Satan's old homestead having no fury like a woman left out on the limb? If you bump into Helen MacDowell, pal, you better fly, not run, to the nearest cavern."

Hank cracked his knuckles in misery.

"Couldn't do nothin' else, Jim. Couldn't marry her. 'Twarn't logical."*

"So," I reminded him, "aren't females. But never mind that, Hank. Let's get down to brass tacks. The reason I wanted to see you—"

"I know. About the way them men's been disappearin'," he said. He rose and walked to my radio set. "'Pears like you oughta have this turned on. With all the trouble, seems like you'd be listenin' for news bulletins."

"It's busted," I said. "It hasn't worked for weeks."

"NO?" He shifted it around, peered into the maze of coils, tubes, wires and utter incomprehensibles that comprise a modern radio set.

"Hmm. Never see'd the innards o' one o' these things afore. Interestin', ain't it?"

His lean fingers began weaving among the gleaming entrails. A tiny crease appeared over his right eye. He muttered as he pushed and jiggled and explored.

"This one goes there; that one goes *there*. 'Pears like— Well, I'll be durned!"

Something clicked, and his fingers made a twisting motion. He grinned at me.

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*In "The Scientific Pioneer," AMAZING STORIES for March, 1940 Horse-sense Hank refused to marry Helen MacDowell because, with his uncanny power to foretell the future, Hank knew their baby would be a chorus girl when it grew up. Hank is allergic to chorines.—ED.

"How d'you make 'er talk, Jim?"

"She doesn't. She's a deaf mute. But that vernier on the left—"

He turned it. My long-silent radio went, *"Phweeee-gwobble-gwobble!"* — and became coherent. Strains of hot jive assaulted my eardrums. I moaned.

"Hank, do you know everything? The repairman who looked at it said it would never work again. He said—"

"He jest wanted to sell you a new one," consoled my friend. "I kinda figgered as how adjustin' that little hunk o' metal would fix it. You see—"

But I never got to see. For at that moment my eyes went wobbly all of a sudden. Out of nowhere came a brilliant light, flooding the room with blinding intensity. There was no sound; just that sharp, bright glare—and my arms tingled with a sort of electric vibration.

And as I blinked, the light coalesced into a form! It was, roughly, the form of a man—and from where its head should be there came a strange, strained, hollow voice.

"Ombiggs!"

Then the light flickered, and was gone, and with it was gone the voice and the last vestige of my self-control. I let loose one squawk—out loud!—and dived for the darkness and comparative security of the region under the couch!

Not so Hank. He stood stockstill in the middle of the floor. I yelled at him,

"Hank, did *you* do that? Did you touch something on the radio?"

There was a faint, puzzled look on his face.

"Nope, Jim. I didn't do nothin'. Did you see him, too?"

"I saw him. Whoever he was. But who—how?"

"I dunno." Slowly. "Leastwise, the only thing I can think of is so durn unlikely— Hey, listen!"

The radio music had stopped suddenly. The voice of the announcer was clear, crisp, ominous.

"Ladies and gentlemen, we interrupt this program of dance music to bring you a special bulletin. *Flash!* Midland University campus. Dr. H. Logan MacDowell, president of this institution, vanished suddenly five minutes ago from the midst of a group of friends gathered at his home to discuss two similar occurrences at Midland within the past week.

"Police efforts to solve the mystery were hampered by the ensuing panic. A diabolic plot against the persons of eminent American educators is feared by observers—"

The rest was lost to us. Frenzied footsteps beat a tappity-tappity path to the door of my apartment, and nervous hands beat wooden panels. A sweet, familiar voice, now high-pitched in fright, cried,

"Jim! Jim Blakeson! Quick—"

The door and sheer courage were all that sustained her. As I opened the first, the second gave out. And Helen MacDowell moaned gently and collapsed into my arms!

CHAPTER II

Unexpected Journey

I YELLED, "Get some water, Hank! And some brandy!"

I carried her to the studio lounge. Hank came back with two glasses. I gulped the brandy swiftly, and held the water to her lips. Pretty soon she spluttered, pushed the glass away, and opened her eyes.

"Oh, Jim! The most dreadful thing has happened to daddy. We— *You!*"

Hank swallowed convulsively and essayed a grin.

" 'Lo, Helen."

Helen MacDowell's fingers made mo-

tions like shears on a rampage. Her eyes roved. She asked thoughtfully,

"Jim, where's that paperknife you used to have? The long one? I'm going to stab somebody in the back!"

"Look, sugar," I pleaded, "Hank's come to help us. We have more important things to worry about now than your injured ego. After we've cleared up this trouble, you can have him alone in a dark room for ten minutes—"

"Is that," she demanded fretfully, "a promise?"

But her bitterness subsided; anxiety rekindled in her eyes. That, and the recollection of a shocking moment.

"Daddy disappeared, Jim! Right from the middle of a group. He was standing at my side; his shoulder was almost touching mine. Then all of a sudden—he was gone! Like that!"

Under any other circumstances, I would have guessed that the old windbag had finally blown up and drifted away. But there was precedent now for his Houdini act. One with sinister overtones. Three men and an animated gumshoe detective had vanished.

But I said, in a voice that I hoped wouldn't sound too much like a dish of unchilled tapioca,

"Now, don't worry, Helen. Everything's going to be all right. There must be a logical explanation for this. Hank's just the man to—"

And then—there it was again!

A blinding flash of light. A weird vibrancy tingling my body, drawing taut the tiny hairs of my forearms and neck. Light motes dancing giddily before my eyes, coalescing to form the figure of a man. A wavering, mobile figure, from the uppermost nebulosity of which emanated a piteous, hollow voice.

"Skleeva! Skleeva—"

Then a swift, dulled paling of the light. Burning white tarnished into red-ochre, red-ochre brazened, the green palpitated to a deep blue-indigo. The figure before my eyes took on form and substance. I saw with a sense of stark disbelief it was tall and lanky as Hank himself, that it wore a uniform of some sort, that its eyes were not unfriendly but haggard and despairing. And then,

"Ombiggs!" wailed our impossible visitor. *"Ombiggs! Skleeva?"*

And vanished!

I stood still. Very, very still It was not courage. It was rivets in the soles of my feet. My brain clamored,

"Go, boys, go!" But my knees were clattering and banging like the fenders of a T-model Ford.

HELEN wasn't much better off. Her eyes looked like a pair of sealed-beam headlights, and the most intelligent sound she could summon was a faint, plaintive,

"Oooooh!"

Only Hank retained an iota of self-control. And to tell the truth, his comment was far from enlightening.

"Well!" he said. "So *that's* it!"

"What's what?" I asked him shakily. My paralysis was slipping away, and I prepared to do ditto. "Friends, did you see what I saw? Or has the little brown jug finally done what the Temperance Society told me it would do some day?"

Hank said, "Now, Jim! It ain't like you to act so. 'Specially when we've reached what you might call a crooshul moment. Hmm! Now, lemme see. You folks seen him most plain when he was what color? Blue?"

"Sort of. Bluish-green."

Helen said, "Greenish-blue."

"That's near enough," mused Hank. "That'd be—mmm!———'bout .0005 millimetres. I'll tell him that when he comes back—"

"When he comes back?"

"Why sure!" Hank stared at me amiably. "He'll be back any minute now. He done a lot better this time than the first, don't you think? Next time he'll probably get what he wants."

"And," I faltered, "and I suppose you know what that is?"

"Reckon I do," said Hank complacently. "He wants *me*."

I gave up trying. My brain was in a muddle, anyway.

I said, "All right, Hank. You win. Now get down to straight facts. Who *is* he, *where* did he come from, *why* does he want you, *how* do you know he does, and *what* is this all about?"

Hank shifted uncomfortably.

"Well, now, Jim, that's a powerful lot of questions at one lump. Dunno's I can answer 'em all—yet. Hafta talk to him first, o' course, but as near as I can figger, here's the set-up.

"That guy ain't from our time. He's from some time which ain't come yet. The future, so to speak. I don't know his name, 'cause he didn't speak very clear, but I know who he wants 'cause he said me."

Helen said dazedly, "He *said*—"

" 'Where's Cleaver?' " explained Hank. "Oh, it wasn't very clear. He was all excited. But that's what he meant, I reckon."

I swallowed hard and wished the goose pimples would get off my hide.

"You mean," I said, "he's coming back out of future time to talk to you?"

"Seems as if. More like, he'll want to take me with him," Hank said calmly.

"What! But, Hank, that would be awful! You mustn't allow anything like that—"

Hank said bluntly, "You want I should find out where Helen's old man is, don't you? And them two puffessors? Way I figger, Jim, there must be somethin' awful drastic goin' on there in the future. Somethin' so bad, it's got 'em all upset an' they're back-draggin' the past for me. By accident, they musta got Hallowell an' Tomkins an' Helen's pop. I've got to get over there an' find out what's the trouble— Here it is!"

FOR an instant there had flickered again that ray of light. Hank warned hastily,

"You two stand back out o' the way! Keep calm an' don't worry. I'll be back directly."

He stepped into the middle of the room as the bright, golden light suddenly flamed anew. He lifted his voice.

"Point oh-oh-oh-five, friend. Or thereabout—"

And the light changed. Slid swiftly down the wavelengths again to that hue most favorable. The figure appeared, this time firm, unwavering. It was the face and figure of a man remarkably like Hank Cleaver himself; a young man, serious-eyed, hopeful of voice.

"Cleaver?" he cried. "You Cleaver?"

Hank nodded. "Mmm-hmm. I'm him."

"Come!" said the young man. "Come, Hank Cleaver."

He held out his hand. And Hank stepped forward into the blaze of pallid, green-blue light.

Which was just one too many for Helen MacDowell. A tiny groan escaped her lips. She tottered, pitched forward to Hank's shoulder. Hank turned worried eyes to me.

"Grab her, Jim! Get her back before—"

And I, too, leaped forward. I got my hands on Helen, started to pull her from that color-field. I was aware of the distant throbbing of some unknown machine, then of a swift, sudden shock. Great forces wrenched at my body. I

felt as if I were being racked in a titanic tug-o'-war. There was an instant of frightful cold, another of giddy nausea, a sensation of wild, hurtling motion.

Then blackness, soft, warm and impenetrable . . .

No, not impenetrable. For there was a light in my eyes, and my head was no longer swimming, and I was lying on something comfortable, and a friendly voice was saying,

"Here you are, Buster. Drink this!"

So why look a gift drink in the bottle? I drank it, and immediately felt warmer inside. And more confident, too. Until I lifted my head and looked about me. Then I let loose a howl that stretched from here to there, with reverberations.

"Great galloping saints, where am I? No, don't say it! Let me guess. World's Fair?"

My young companion looked puzzled. He was a decent-looking chap, except for that wild costume he was wearing. A sort of uniform, but it reminded me painfully of a Buck Rogers serial. Loose tunic and slacks, sky-blue, with a Sam Browne belt and a gun holster into which was jammed a weird-appearing weapon, all knobs and studs and buttons.

"How?" he said.

I said, "My—my friends? Where are they?"

"They're up and around. You're the only fader."

He grinned. "You must be allergic to electricity, huh?"

I was still staring about me. The room was a humdinger. All metal and plastic and glass; a small cubicle about six by ten, with a single bunk (that on which I now sat, poised for flight) a desk, chair, porthole—

Porthole!

"So that's it!" I yipped. "Shanghaied!"

I MADE a dive for the porthole, pressed my nose to it, hoping that across the bounding blue I might see at least one faint ribbon of good old terra firma.

But there was no land. There was no bounding blue. There weren't even any clouds or sky! There was—just gray. Wan, dismal gray that seemed to stretch into infinity!

It was plain that I needed either one less drink or one more. I settled for the latter. A long, straight one. It snapped me hurriedly out of my speechlessness.

"Not that it's any of my business," I said, "but it looks to me like there's nothing outside that porthole but a lot of gray emptiness."

My companion nodded dolefully.

"Yeah," he said, "I know. I've looked—and looked."

"Where I come from, space usually has things stuffed inside it. So apparently I'm not there. Which being the case, would you mind telling me where the hell I *am?*" I demanded.

He shook his head. "That's just it, Buster. We don't know."

"You," I told him, "are a big help. Pass the bottle. Do you happen to know your own name?"

"Yeah," he said. "Mud. It used to be Bert Donovan. I'm the radio operator aboard this ship."

"Ship?" He was beginning to talk sense now.

"Lugger, I should say. This is the *Saturn,* friend. IPS freight lugger, operating on the Earth-Mars shuttle. Or, anyhow, we *used* to. *Till* he got monkeying around with that new power drive of his—"

"IPS?" I strangled. "Earth-Mars? *He?*"

"Take it easy, friend. IPS—interplanetary space ship. Earth-Mars—round-trip route, originally. Naviga-

tor, Lancelot Biggs, the first mate.* Didn't you know—"

"Omigod!" I bleated. "Don't tell me, but I—we—all of us are in the *future!*"

Donovan caught me as I was about to collapse and clapped me heartily on the back. I think it did more harm than good, but at least it brought me out of the fog.

"Correct," he said unhappily. "We're off in the future—hmm—maybe two-three hundred years. Myself, I don't understand how the hell it happened, but—"

At that moment a bell sounded. We turned to a hunk of square glass set in a side wall. It lighted, and a crusty-looking face scowled down on us, eyed me appraisingly.

"Ah, so you've recovered, young man? Fine! Your friends are waiting here in the control turret. Sparks, come along up here. Mr. Biggs has called a general conference."

The light dimmed. Sparks grinned at me languidly.

"That's the Old Man. Cap Hanson. Well, let's go, Buster. The fireworks are about to begin."

"The name," I told him, "is Blakeson. And how come the fireworks? Me no savvy."

"You heard him say L. Biggs was in the control turret, no? That's the tip-off, Bust—"

"Blakeson!" I said firmly.

"Blakeson," he corrected. "Okay, Buster. Come on!"

CHAPTER III

Lancelot Biggs' $\sqrt{-1}$

THINGS moved so swiftly then that the series of surprises I received was practically one continuous blow. The walk through the *Saturn* was a revelation in itself. Like the cabin in which I had awakened, the ship was all metal, glass and plastic. And a funny metal at that. It was hard, but it looked soft, if you know what I mean. Which I'm sure *I* don't! The name of the metal, Donovan told me, was "permalloy." It was a special, non-conductive, something-or-other resistant alloy.

"—invented," said Sparks, "around the end of the twentieth century." And he looked at me curiously. "Oh. I forgot. You wouldn't know about that, would you?"

"Look," I said desperately. "Let me know when we get to the Psychopathic Ward, will you?"

But he didn't get it. We walked down one ramp and up another, through an observation room, climbed a ladder, and finally ended in the room the skipper had called the "control turret." And what a place *that* was!

It looked like an overgrown cyclotron with a purpose. Huge, banked panels with studs on them, cryptic plates, coiled thingamajigs, mechanical what nots and doolollies all over. More guys in sky-blue uniforms. Bells tingling, television screens popping on and off at intervals . . .

"Interestin'," said a voice at my elbow, "ain't it?"

And it was Hank, gulping and grinning and shaking my hand.

"Kinda worried about you, Jim. You

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*Author Nelson S. Bond first introduced Lancelot Biggs, space navigator and jack-of-all-trades, in the November, 1939 issue of FANTASTIC ADVENTURES, our companion magazine, under the title "F.O.B. Venus." The second mate aboard the *Saturn*, space freighter plying between Earth and other colonized planets under the somewhat bilious leadership of Cap Hanson, Lancelot Biggs got himself promoted to first mate after getting the space freighter out of a bad fix. Author Bond, now one of the top-notchers in popular fiction, has in this story combined two of his best-liked scientifictional characters—Lancelot Biggs and Horse-sense Hank.—Ed.

shouldn't ought to have allowed yourself to be drawed into the power-field."

But seeing Hank had made me think of Helen; and now, looking for Helen, I found something that completed my mental collapse. Helen was standing shoulder to shoulder with—none other than her old man, himself, in person! And right behind H. Logan MacDowell stood the missing professors, Hallowell and Tomkins. And lurking behind them, looking more baffled—if possible—than myself, was an exceedingly disgruntled individual in a hard hat. The vanishing detective.

I answered their nods weakly. Then I turned to Hank.

"I give up, pal. What is it? The after-world? Or Old Home Week?"

Hank said seriously, "Well, reckon as how you might call it the after-world, Jim. In a way. It's the world which is to be. But here comes the feller that can explain everything."

For the door had opened, and in walked the chap whom we had seen thrice in my apartment, the effervescent spirit of electricity, the blue-green mystic, the first mate of the *Saturn*—Lancelot Biggs!

DID I say "walked?" Excuse it, please. What he did with his feet could never, by the wildest stretch of the imagination, be called walking. Oh, he progressed forward, yes—but there are no words to describe his locomotion. Think of a polar bear on a pogo stick. Or a secretary bird on skates. A two-footed octopus, even.

His gait was a combination of the worst features of all three. He lurched and shambled, his bony knees protruding as if acknowledging introductions at each passage. A sort of, "You let me by this time, and I'll let you by next time!" deal.

But the peculiarities of Signor Biggs did not end at that point. He had others. I have said that he looked a bit like Hank Cleaver. That is true. They shared lean lankiness of build. Each was blessed—or cursed—with a mop of faded-yellow hair; their eyes were alike in that they mirrored soft curiosity. But Biggs had an appendage Hank lacked.

Matter of fact, no man ever had an Adam's-apple like that before or since. It hung in his scrawny throat like an unswallowed cud; and when he smiled—which was often—or talked, it woggled up and down like a runaway elevator.

To Sparks, b e s i d e m e, I said dreamily,

"I see it, but I don't believe it. Is it alive?"

And then Biggs addressed us.

"First of all, I must apologize to you, Mr. Cleaver, and to Miss MacDowell and Mr. Blakeson for this rude infringement upon your personal privacy. It was an unwarranted step I took, intruding on your lives this way, but I hope that you'll agree it was not unforgivable.

"I have already explained to these gentlemen"—he bobbed his head toward the pedagogues and the shamus—"the urgency of our situation. To clarify in your minds the how and where of your present location—"

Hank Cleaver *harrumphed!* and interrupted.

"Reckon as how you can skip that, Lootenant," he said. "It's purty clear. You bridged the time gap from *your* time to *ours* by means of an ultra-wave temporal aberrant. Brought us up a couple o' centuries to 'bout the—well, 'bout the twenty-third century."

Lancelot Biggs tried hard to swallow the billiard ball under his chin.

"How—how did you know that, Mr. Cleaver?"

Hank scratched his head, and into

his eyes came the old, baffled look that always came there when he was asked *how* he knew anything.

"Well," he confessed, "I don't 'zackly know how I know, but I do. Just stands to reason, that's all. When you come slidin' down the visible waves to hunt for us, an' when we woke to find ourselves on a space ship—an' as for the time element, well, I alluz 'lowed as how it'd take people 'bout fifty years, more or less, to make the first successful space flight, an' another two hundred to git it workin' proper—"

Lancelot Biggs' eyes lighted with a great joy.

"Mr. Cleaver, I touch my rocket to you! The ancient records do not lie. You are indeed a remarkable man. *Now*"—he turned to his fellow officers triumphantly—"now I *know* we shall win free of our difficulties. With your assistance."

HANK flushed, and squirmed a bulldog toe.

"Mebbe you better explain these here difficulties."

It was Biggs' turn to flush.

"I'm afraid," he said miserably, "it's all my fault. Six days ago, Earth Standard time, we lifted gravs from Long Island space port for Mars Central. This was to be my final shuttle before getting married to the skipper's daughter, Diane. Consequently I was a trifle—well, impatient. But I'm sure you understand, Mr. Cleaver."

Hank said hastily, "You better git on, Lootenant." He didn't look at Helen, which was a good thing.

"For some time," continued Biggs, "I have been experimenting with a new device, designed to increase the speed of our vessel. It seemed particularly appropriate that this shuttle should be the test period. So with Captain Hanson's permission I installed my new velocity intensifier on the hypatomics. After we cleared Lunar III, I switched it on—"

Biggs stopped. His eyes were haunted.

Horse-sense Hank said, "Yeah?"

"There was a moment of frightful acceleration, then a sharp explosion, and when order was resumed—here we were!"

Nobody spoke, which seemed silly.

"That," I said, "doesn't make sense. Here you were. So *where* were you?"

"That," said Biggs dejectedly, "is just what we don't know! Ah, that sounds ridiculous to you, gentlemen? Believe me, if you knew space, as we who shuttle back and forth within it in our daily toil, you would recognize by merely glancing through the quartzite viewpanes that we are nowhere within the confines of man's studied universe!

"Space is an ebon, eternal night, pricked by a myriad glowing sparks. The stars wheel in their courses. Comets scream through the infinitude. The planets, firmly shining in the reflected glory of their several suns are colored gems upon a velvet pall. But about us now we see nothing but a dull, endless gray. There are no cosmic clouds, no meteor mists, no stars; neither light nor dark. Only nothingness, complete and unresponsive to our best instruments!"

"Huh!" broke in Hank. "Whazzat you say?"

"Apparently," explained the young lieutenant, "our delicate instruments were broken during the explosion. That is the factor making more perilous our position. We are not able to orient ourselves, discover into what portion of the universe our moment of wild flight flung us.

"I have studied and worked and thought on the problem, but to no avail. That is why, Mr. Cleaver, I undertook to find *you*."

Cleaver looked at the youngster admiringly.

"Smart feller!" he said. "Time travel, huh? Alluz thought it could be made to work. Mighta tried it myself if it hadn't been I was so durn busy on them turnips—"

"It was an accidental discovery, sir. I chanced upon it several months ago while inventing a new type of uranium speech condenser. It turned out to be a time-speech trap." *

"Nevertheless," insisted Hank, "you done a good job. Findin' a way to transport your body across time. An' pickin' me up outa 1940, bringin' me here. Like to talk to you about that later. But right now—" He frowned severely. "You say them instruments o' your'n won't work?"

"No, sir."

"Not *a*-tall?"

BIGGS swallowed with difficulty.

"The truth is, Mr. Cleaver—"

"Hank's good enough."

"Well, Hank, the truth is—the instruments *do* work! But they work so dad-blamed funny—"

"Let's," suggested Horse-sense Hank mildly, "have a look."

That was all the invitation the young lieutenant needed. Without so much as a backward glance at the rest of us, he led Hank to the control banks of the space freighter. They began to talk in undertones. Biggs pushed buttons and explained things. I heard snatches about, "tensor alleviators," "orbital velocity adjusters," and a bunch of terms even less comprehensible, and gave it up as a bad job.

It was Hank's party. And his headache.

I turned to my self-appointed guide, the radioman, Bert Donovan.

"Do you understand what they're talking about?"

He grinned. "Buster, I've been listening to Lancelot Biggs talk for almost a year now. And I have yet to understand the first thing he tells me."

"Then in that case," I said, "it looks to me like a drink is indicated. Right?"

Right is might, and shall prevail.

I DON'T know how long later it was that we wandered back to the control turret. It must have been quite a while, for Sparks had shown me through the entire ship. When we got back, Cap Hanson and Doc Hallowell were playing a game of high-low, and the *Saturn's* skipper was giving Hallowell a good old-fashioned, twenty-third century going over.

Tomkins and MacDowell were napping quietly. The second mate, a guy named Todd, was making motions at guiding the ship's flight through nothing, and also making a mild play for Helen MacDowell. And not getting very far with either job.

Biggs and Cleaver had finished inspecting the instrument panels, and were in earnest confab by the plot charts. Hank seemed to be summarizing their decisions.

"—your new gadget was supposed to eliminate every speck of energy waste, huh?"

"That's right. And thus conserve fuel, at the same time giving tremendous speed," Biggs nodded.

"An' when you plugged the switch, it gave one whoop an' holler, the *Saturn* went like a bat out o' hell for a few seconds—"

"—and then," finished Biggs, "we found ourselves here. That's the story, Hank. The whole story, so help me. But if, from those few facts and what I've shown you, you can explain in what part of the universe we are, you're an

*"The Madness of Lancelot Biggs," FANTASTIC ADVENTURES, April, 1940.—ED.

even greater genius than history says you were— I mean, are."

Hank cocked a quizzical eye. "That's funny, ain't it?" he mused. "I was, but I still am. Time's tricky, Lanse. But, listen, you made one mistake."

"Yes?"

"In sayin' 'what part o' the universe.' Way I see it that ain't the explanation *a*-tall. Way I see it, there's two kinds o' universes. The *is* an' the *ain't*. An' we're in the other one."

"I—I beg your pardon?" faltered Biggs.

"Put it this way. You draw a graph, an' you cross two lines. The block at the upper right intersection o' them two lines is the *is* universe. The one we live in. Ain't that right?"

Biggs nodded. "That's a simple way of graphing existence, yes. The horizontal line would represent existence in space, the vertical line existence in time. At any given moment, a man's position in space and time is coördinated in the positive sector. But—"

He stopped abruptly, looking at Hank with startled eyes.

"But you don't mean, Hank, we're in the *bottom* sector of the graph!"

Hank sighed. " 'Fraid that's 'zackly what I do mean, Lanse. It's no wonder nuthin' looked natcheral to you. We done bust plumb out o' space an' time as we ordinarily know it. We're in the imaginary sector o' space-time! The coördinate of where we are now ain't even positive numbers. They're all based on a negative factor—the square root o' minus one!"

CHAPTER IV

Danger Ahead

I LOOKED at Bert Donovan and he looked at me. Judging by the faces of our two screwball intellectuals, there was something smelly on the *Saturn*. But it was all a deep and dark mystery to me.

I said, "Hank, for old times' sake, would you brush that off again lightly for me? In words of one syllable, what has the little letter *i* got to do with space flight, gray skies and time-travel?"

But Hank ignored me. On the right track at last, he was developing his arguments.

"Reckon you know more 'bout energy-mass relationships than I do, Lanse. 'Spect you'll remember, then, the transformations cooked up by a guy from our time, feller by the name o' Lorentz? Him an' a couple other guys named Einstein an' Planck fiddled around with hyper-spatial mechanics an' discovered some interestin' things. Includin' the fact that mass is altered when it travels at high velocities.

"Whut I figger musta happened is this. The gadget you invented worked even better'n you expected. It worked so durn well that it give the *Saturn* one whale of a kick in the pants. Made it accelerate at a speed *greater than that of light!*

"So then what? Why, then the *plus* universe warn't big enough to hold the *Saturn* any more! That wild minute or two you talked about was when you exceeded the limitin' velocity. An' then here you was in the minus universe! Which is, so to speak, the negative matrix of the normal *plus* universe we ordinarily live in."

It didn't make sense to me, but apparently it did to Lieutenant Biggs. He passed a damp palm across a sweating forehead.

"You're right, Cleaver! You must be right, because your argument agrees with all the known theories and observed facts. The incredible readings on our instruments, the weird surroundings in which we find ourselves—" He

stared at my friend sombrely. "But what are we going to do? How shall we get out of here?"

Hank said, "Same way we come in. We blast out."

"But I've tried that, Hank," Biggs defended. "Before I realized the full extent of our situation. And nothing happened. There's something strange in the response of the motors. Don't ask me what. It's hard to say, when the *Saturn* is plunging into beaconless, starless nothing. But stepped-up acceleration is just a waste of fuel."

"Yeah?" mused Hank. "That's queer. Now, I wonder why—"

At that instant came a most unexpected interruption. Todd, who had been quietly tending his controls, suddenly came to life with a startled cry.

"Well, I'll be— Biggs! Captain Hanson!"

"Yes?" Both men answered at once.

"There—there's a large body before us!"

HE pressed a button. A glassy pane above the panel glowed into life. As if a portion of the *Saturn's* prow had been sheared away, I was looking at the vista before us. But it was no longer empty as, according to Biggs, it had been ever since the moment of the "accident." The stark, gray loneliness was relieved now by a monstrous pockmark in space. A giant sphere, imponderably distant, but definitely on our trajectory!

Hanson was a man of action, I learned. He leaped to the intercommunicating system.

"Chief Garrity! Large body for'rd! Reverse hypes and apply drag instantly. Todd, plot a course revision! Man! What a monster! Biggs, get out the charts. Something solid at last. Maybe we've busted back into our own universe!"

Biggs said, "Yes, sir! Right away, sir!" His eyes questioned Hank. But Cleaver shook his head.

"Nope, I don't think so. It ain't logical. That's a phenom—a phenom—a pee-culiarity o' the cockeyed universe we're in— Hey! What's goin' on here?"

The constant hum of the hypatomic motors below, one I had hardly noticed until suddenly it no longer throbbed in my ears, had subtlely altered. A brief instant of silence, a jarring concussion—and a deeper, more resonant sound.

Biggs explained, "That's the hypatomics being thrown into reverse. Antigrav units are activated in the nose of the ship, then when we get the course variation we swing around our objective. Common space practice, Hank."

"That's what," said Hank dubiously, "I figgered. Is it common space practice to make a beeline for danger, though, like Billy-be-damned?"

And he pointed to the visiplate. Biggs' eyes followed his finger—and Biggs gasped.

"Great whirling comets! It's got us caught!"

For despite the mounting clamor of the reversed engines, despite the antigravitational units of which Biggs had boasted, despite the swiftly redoubled orders and efforts of a shocked Captain Hanson—the *Saturn's* speed had definitely increased!

The figure in the plate was looming larger moment by moment, and even to my untrained eye it was plain that we were slam-banging, hell-for-leather, toward a crackup!

Don't ask me what happened in the next few minutes. I wouldn't know. It's all one whirling blind spot in my memory. Up till now, this entire affair had partaken of the nature of a dream. Amusing, not unpleasant, but quite remote and faintly incredible.

Now, suddenly, I realized it was not

a dream. But that I, Jim Blakeson, publicity representative of Midland U., had somehow been dragged out of the normal routine of everyday life and thrust into a wild, impossible adventure in a world three centuries beyond my time.

It was a disturbing awakening. It didn't make matters a bit better to realize that I was now—along with five other twentieth century exiles—in imminent peril of being slapped out of existence by a gigantic planet that shouldn't be in a dull, gray universe that didn't exist!

ABOUT me, frantic figures boiled and churned. The skipper of the Saturn was bouncing about the control room like a bipedal gadfly, jerking switches, bellowing orders, pawing through charts that—to me at least—were a complete mystery.

Dick Todd still sat, tense and grim-jawed, in his bucket-shaped pilot's chair. His fingers played the banked controls before him as the fingers of an accomplished organist seek stops, but so far as I could see, his movements availed nothing. For the object in the visiplate loomed larger and ever larger.

Lancelot Biggs had wasted very little time scanning charts. Despairing of finding any record of this cosmic visitant, he had grabbed paper and pencil, and was now scrawling hasty calculations. Hank Cleaver was watching him. I glanced at Helen. She was watching Hank. Rather hopefully, I thought.

Hank said, "What's it show, Lanse?"

Biggs looked up at him haggardly.

"The mass of that planet must be terrific. It has a heavy gravitational attraction. We're accelerating by leaps and bounds. At our present rate of acceleration, only about twenty minutes remain before we—we—"

He paused, glancing helplessly at Helen MacDowell. There was a strange longing in his eyes. I remembered, all of a sudden, a fact he had mentioned. That somewhere back on Earth, a girl waited for him. A girl who had promised to be his wife. His next words showed that he shared my thought.

"I don't mind checking out," he said quietly. "We who dare the spaceways risk that hazard always. But I wish I could have seen her once more before—"

It was then that Hallowell pushed forward. He was scared, and plenty scared. So scared that his voice was a thin, bleating yammer.

"Lieutenant, you can at least send us back to our proper time! You can't let us die like this! Without a chance—like trapped rats!"

"Rats!" I said scornfully. "Speak for yourself, Hallowell!" But Lancelot Biggs nodded.

"He's right. We still have twenty minutes. It is not right that you of another age should share our fate. We must get the temporal deflector into operation, send all of you back—"

Hank cried sharply, "Just us? Why not everybody, Lanse? Let's *all* escape to the twentieth century. The whole kit an' kiboodle!"

But Biggs shook his head.

"I'm afraid that is impossible, Hank. There are limitations to temporal transmission. You and your friends can enter *our* time because there is no natural barrier, but *we* cannot violate the established world-line of things that have been. We never were in your time, therefore we cannot now go there. But, wait—"

He spun swiftly to a wall-audio, spoke to the engine room below.

"Get the deflector ready. We're sending our guests back!" Then, nodding to all of us, "If you will come with me—"

WE started for the door. But we had taken just a few steps when the audio buzzed. Biggs answered its call, listened for a moment, cried out,

"But Garrity, are you absolutely sure? It can't be! It mustn't be!"

The clacking voice was regretful but positive. I felt a thin, cold edge running up and down my spine. Now I look back upon it, I think I guessed what Garrity was saying even before Biggs turned to us, his eyes wide with sympathy and sorrow.

"My friends," he said in a choked voice, "forgive me for what I must say. Your lot is irrevocably cast with ours. The strain on the motors has burnt out several vital units. There is not time enough now to repair them. The temporal deflector is—useless!"

That was a jolt. The way my several comrades took the message was the measure of their characters. Hallowell cried out sharply, began to scream protests in a frightened voice until Prexy —fat, staid, stuffy old H. Logan, himself—silenced him with a backhander across the mouth.

"That will do, Hallowell!" snapped MacDowell. And he seemed to grow three inches. It was a mile in my estimation. "I think, Lieutenant Biggs," he said, "we need no further apologies. We are not afraid to die with you."

I forgot to dislike the old guy then. I loved him a little bit for that. And I liked Tomkins' reaction, too. The little observatory technician sighed wistfully.

"It's too bad, though. I should have liked to take back to our time a knowledge of some of the marvels we have seen here."

The detective said nothing. He still didn't seem to know what the hell it was all about. But Helen MacDowell was as game as her old man.

She said, "We're not licked yet. I still think Hank—I mean, Mr. Cleaver —will find a way out of this."

Biggs said gently, "I'm afraid not, Mrs. Cleaver. This is the end for all of us."

Helen's eyes darkened suddenly.

"*Mrs.* Cleaver! My dear lieutenant! I'll thank you not to couple my name with that of this—this person! What ever made you think I was his wife? I wouldn't marry him if he were the last man on earth—"

And then Lancelot Biggs did a strange thing! For a startled moment he stared at Helen MacDowell incredulously. Then he loosed a terrific whoop. And I don't mean whisper.

"*Eeee-yow!*" he howled. "You and Hank aren't married?"

"Why, of course not!"

"You—you haven't any children?"

Helen turned brick-red.

"After *all,* Lieutenant—" she began stiffly. "But, *really!*"

I don't think Biggs heard her. For he had leaped to Cleaver's side, was pounding him enthusiastically upon the back and shoulders.

"It's all right, then! You understand —it's all right! Get those brain-cells to work, Hank, old boy! It's in the bag! *Eeee-yowee!*"

And Hank Cleaver, from the depths of a brown study, said suddenly,

"Say, looka here—I been thinkin'—"

CHAPTER V

Minus Math

LANCELOT BIGGS said feverishly, "Don't think, Hank—act! Anything you say is all right by me. You're in command here! Give your orders!"

Hank said hesitantly, "Well, if you say so—" and moved to the audio. With his unerring sense of assurance, he selected the right button, contacted the

engine room. Chief Engineer Garrity's grizzled face appeared in the plate.

"Yes, sorr?"

"Chief, turn off them there reverse engines right away," said Hank hesitantly. "An' disconnect them anti—er —anti-grav doogummies."

Garrity's jaw fell open. He said, "I —I beg your pardon, sorr!" and looked around the room for verification of the orders. Cap Hanson, too, had heard the command, and was turning a violent mauve. But Lancelot Biggs nodded.

"Do as Mr. Cleaver says, Chief."

"—an' when you git done doin' them things," Hank persisted gravely, "I want you should git up steam. An' push for'rd as hard an' as fast as you can. With—" He swallowed hard. "With the auxil'ry use o' that new speed gadget Lootenant Biggs invented."

Garrity almost strangled, but he got the words out.

"Yes . . . sorr!" Then he faded from the plate. Biggs stared at Hank.

"You—you're sure you know what you're doing, Cleaver?"

"I think I do," said Horse-sense Hank. "It's the only thing makes sense. I figgered an' figgered, and it looks to me like there's only one logical way to act. We'll know in a minute if I'm right."

He dug his toe into the carpet, sort of grunted, coughed, glanced at Biggs.

"Got a mite excited about me not bein' married, son. I been thinkin' that over. You mean to say—"

Biggs, looking confused, said,

"But you see, Hank—"

"Yeah. Reckon I do. An' you—an' you—"

"Yes, sir," said Lancelot Biggs.

I stared at Donovan.

I said, "What makes with the brain trust? Double talk?"

He said, "Don't ask me, Buster. I just work here. Or used to. It's even money whether I continue working or learn to play a harp. What with that screwy command your friend Hank gave—"

Then he, and I and everyone in the room stopped speaking. For again there had come, remotely, a different tone-value from the engine room. Hank's orders were being obeyed! And all eyes centered painfully on the visiplate in which, almost blotting the entire frame now, was mirrored the onrushing planet. . . .

CAN I explain my feelings to you? I doubt it. All I can think of is to say that I felt like a very tiny fly on a wall, watching helplessly, wingless, unable to escape, as a gigantic flyswatter smashed down at frightful speed upon me. The *Saturn* was a huge craft, yes, but it was a speck of dry dust compared to the colossal sphere toward which it plunged.

At this velocity there could be but one result to a collision. Death, swift, crushing, horrible, for all of us. A moment, I thought, of incredible pain. A torrent of madness beating at the eardrums, the fires of hell flaming before the eyes—then oblivion.

Nearer came the planet. I could see now that it was as mad and wild as the unspawned negative universe in which it floated. No life. No thin film of atmosphere to blue the sharp definition of its raw terrain. A weird, dead world in a universe that could not be.

I was aware of Donovan at my side, breathing hard. I glanced across the room at Lancelot Biggs. His eyes were strained, the muscles of his jaw white. His lips were half parted. Perhaps it was imagination, but I thought I caught the whisper of a name.

"Diane!"

And then a stranger thing happened. There came a sudden, tender little cry

from Helen MacDowell. A flurry of movement. And then she was across the room, was in the arms of Hank Cleaver! And she didn't seem to care that her words carried to all of us.

"You've failed, Hank! But I don't care. I don't care. It's too late to pretend now that I hate you. For I don't. I love you, Hank . . ."

Then everything happened at once. My eyes leaped back from the Helen-Hank tableau to the visiplate, as abruptly there came a crashing explosion from the bowels of the ship. I saw the planet before us now within—it seemed—but inches! There was a high, tortured screaming in my ears. The grind of motors, the pounding of massive drums, a scream ripping from the throat of Hallowell, a muffled curse from Cap Hanson—

Then a horrible, wrenching shock. I felt my body lifting, floating, hurtling across the floor! Something fell sprawling upon me, glass splintered, a dozen voices cried out at once.

And everything was black, and there was a dead and sickly pressure across my body—

—from the center of which came a muffled voice. The voice of Bert Donovan.

"Well, I'll be triple and everlastingly damned to a fare-you-well!"

I kicked, and he wriggled. I kicked again and he moved.

I said, "If you'll get off my head, you damned fool, maybe I can see what's going on!"

He got up. And so did I. All about the control room, men were picking themselves up, lifting their voices in astonishment, staring at a visiplate from which had disappeared that gigantic, threatening orb.

A VISIPLATE in which was now depicted sweet, jet depths of darkness, pin-pricked with glowing points of light!

Cap Hanson's voice was a paean of joy.

"We're home again! Home in our own universe! By God—in our own solar system! For there's Io, the pretty little devil!"

Helen was crying, "Then you didn't fail, Hank! It worked! We're saved!"

And Biggs, only sane man in a roomful of delight-maddened lunatics, was ambling to the audio, face wreathed in a seraphic grin.

"Garrity?" he called down to the chief engineer. "Take a look out the viewpanes if you want to holler with joy. And then—set course for home! And, oh, yes, Garrity—set men to work immediately on the repairing of the temporal deflector."

So that was that. We took time off to recuperate. Some hours later we were standing in the *Saturn* before a large, cylindrical, glass-walled machine, Lancelot Biggs' "time-travel" gadget which had absorbed us up here into the future. That is most of us were still standing here in the *Saturn.*

Professor Hallowell had already been projected back to our time. So had Travis Tomkins, Midland's observatory expert, his arms loaded with books from the ship's library describing the great inventions of, as on the *Saturn,* the last two centuries—or, to us of 1940, the inventions of the *next* two hundred years.

"Which books," commented Lancelot Biggs wryly, "will do Tomkins a lot of good—I don't think! They won't arrive with him, you know—because in his time they weren't even written! I hope both those fellows will return to their original places on Earth. Rather amazing, wouldn't it be," he chuckled, "if something went wrong with the machine and Hallowell appeared suddenly

on the campus of Midland University with some gadget from the future—*his* future—which fell into his pocket in his transit through space and time!"

"Campus?" exclaimed H. Logan MacDowell. "Don't tell me that time-travel thing of yours will actually set us down again in our own time!"

"If it doesn't," grinned Lancelot Biggs, "a lot of faces are going to be very red indeed."

He motioned to the second mate, Lt. Dick Todd. Todd set himself at the controls. Then he nodded to the detective.

With unseemly haste the gumshoe scrambled into the time machine.

"Contact!" Biggs ordered.

The second mate pressed the button that sent the snooper back to Midland campus. That lug! I don't think he ever did figure out what it was all about! In fact a week later, when I met him skulking along a corridor, I asked him how he liked his round trip through space.

"I'm trying not to think about it," he groaned. "Confidentially, in another ten days I'll be able to believe it never happened *a*-tall, no sir!"

"Brother," I said to myself, "if imagination was a baby chick, you couldn't scratch yourself out of an eggshell."

But I'm getting ahead of the story. After we got rid of the gumshoe, there was Prexy H. Logan MacDowell to be considered.

"You are next, sir," Lancelot Biggs said courteously. "And a pleasant journey."

"Harrumph!" growled his academic nibs. "This is a damnable outrage!"

BIGGS bowed him into the time-traveling contraption.

"I think you've got something there," he grinned—and signalled to Dick Todd. One second later H. Logan was flitting through space back home.

And now it was time for last farewells. But Biggs asked, in gripping Hank's hand, the question I'd been dying to ask myself, but hadn't dared.

"You should tell me, Hank, how you struck on the solution. We may get in a jam like that again, some day. And if we do—"

"Send for me," grinned Hank. "I like this period o' your'n okay, Bud. But you won't get in no more messes like that. Not if you tone down the speed o' that gadget o' your'n, like I told you to.

"My figgerin'? Why, it was just plain, dumb hosslogic, that's all. The tip-off come when we started whiskin' faster an' faster by the moment toward that there planet in our path.

"Y'see, we was in a negative universe. We decided that. But whut we overlooked was the simple, logical fact that in a negative universe all natcheral physical laws ought to operate in reverse!

"Way I see it, we just happened across that planet by accident. An' had we been content to let well enough alone, we'd never have come anywhere near it! It would have shunted us off on its own account!"

I said, "What? How do you figure—"

Biggs exclaimed, "*I* see! In our positive universe, it is axiomatic that all objects attract each other in direct ratio to their masses. But in a *negative* universe—"

"They'd repel each other," nodded Hank. "Right. I guess we was dumb, though. We done the *one* thing we shouldn't have ever done. Put out antigravs and repellor-beams against the upstart planet! Which was the one thing calc'lated to drag us to it! In this backward universe, mathematics

(Continued on page 131)

Hell Ship of Space

by Frederic Arnold Kummer, Jr.

Terror rode the pleasure ship when the moon rebels came. Then a weird thing happened and she became a ghost ship

THE sleek, tapered space shuttle lay immobile upon the private landing field, her steel hull gleaming in the moonlight. Some twenty smartly dressed men and women were visible through the vessel's wide windows. Seated in rows, like the passengers of a twentieth century airliner, they laughed, joked, sipped drinks handed around by a wooden-faced messboy.

The pilot of the space speedster was just climbing into his compartment in the ship's nose, when a car, roaring from the south where New York's fantastic towers loomed against the star-sequined sky, shot through the gateway and a disheveled young man in crumpled evening dress lurched out, suitcase in hand.

"Jush in time." He moved somewhat unsteadily toward the speedster. "Zis the ship for . . . heaven?"

As though by magic two burly uniformed attendants appeared, followed by a wizened, ratty little man immaculately dressed.

"I'm afraid you've made a mistake, sir," the latter said blandly. "This is private property."

His gesture included the space port, the hangars, the low, clublike building.

"The Stellar Aero Club. Only members and their guests are admitted. As for the ship"—he motioned to the speedster—"it is owned by the club for the purpose of taking parties of our members for short pleasure cruises. Vickers, you and Hurley will see the gentleman to his car."

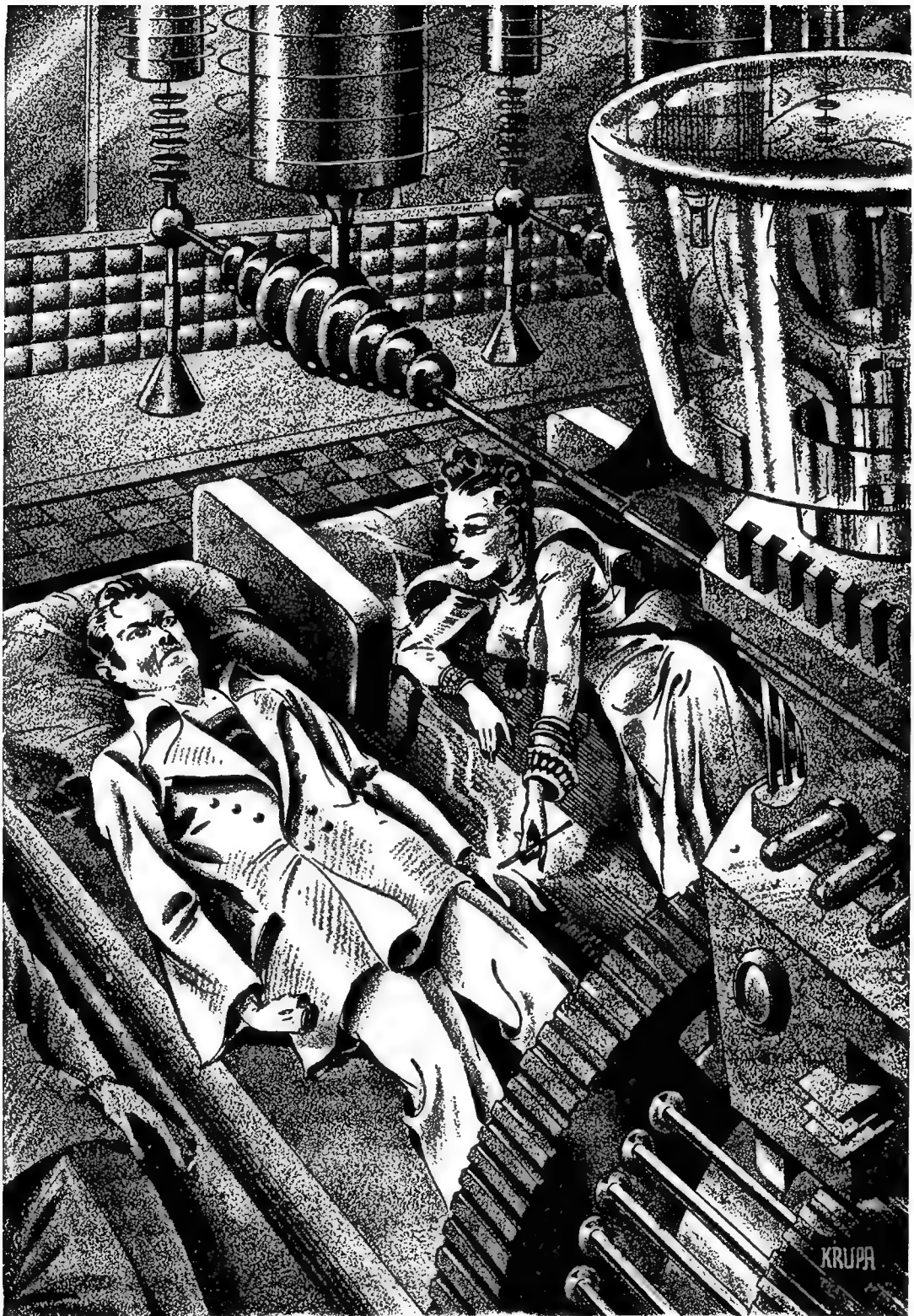
"Wait a minute!" The unsteady young man shook off the two attendants, fumbled through his pockets and produced an embossed card. "How 'bout this?"

At sight of the card, the little man's manner changed to fawning obsequiousness.

"Let me apologize, Mr. Henrichs," he murmured. "But our 'cruises' have become so popular that it is impossible to recognize all our new members. The possibility of police interference makes it necessary to keep up the fiction of a space club. Once in the void, they can't control us. Go right aboard, sir! Have a good time in . . . heaven!"

The disheveled young man nodded vapidly, stumbled into the speedster. His shirtfront was marked with lip rouge and cigarette ashes, his hair was rumpled, and a broad streak of grime across one cheek blurred the strength of his clean-cut features.

His eyes were dark, circled, as if from recent dissipation—though a close ob-



Ranson lay rigidly motionless as the girl burned the cigarette cruelly into his hand

server might have noticed that when he rubbed them sleepily, his knuckles took on the same darkness. Jaded though the young man was, he drew no scornful gaze from the others aboard. Fully half of them also seemed to have come from parties, to judge by their clothes and their demeanor, and they appeared bent on further, greater revelry.

Young thrill-seekers, wealthy financiers off on extended "business trips," lean, hard-eyed gamblers and nervous, irritable individuals whose yellow lips and fingernails stamped them as addicts of the nerve-tingling *san-rays*—such was the space liner's passenger list. Clearly none of the revelers had cause to be fastidious.

The young man studied his fellow travelers, then lurched into a seat across from a rather striking couple. The man, he saw, was big, broad-shouldered, and his features were masked by what was palpably a false beard.

This, however, was no cause for comment, since many of those bound for "heaven" adopted such measures to avoid the breath of scandal.

The woman beside the bearded man used no such device. She seemed proud of her dark, dangerous beauty. Brightly painted lips and nails contrasted vividly with the pallor of her skin. The slight upturn of her tawny leonine eyes gave her a peculiarly exotic air and her body, sheathed in tight green cellotos, was sleek perfection.

The inebriated young man nodded soddenly as the pilot of the speedster set the rockets to idling. Their roar was loud even in the sound-proofed ship and their ruddy glare gave a weirdly mephitic air to the scene. The man with the beard moved uneasily.

"Don't know that I should do this," he muttered. "If anyone found out it would be curtains!"

HIS sensuous companion leaned nearer to him and her eyes gave promises.

"You need a holiday," she murmured. "You have worked *so* hard. Only a few days together . . ."

Before the man had time for further objections, the speedster lurched, slid along its metal runway, leaped skyward. After the first shock of acceleration had worn off, maudlin shouts of excitement broke from the passengers, interspersed with the tuneless chanting of a popular song.

A slim girl raised a glass. "Here's to . . . heaven!" she cried.

The dazed young man who had just come aboard leaned back in his seat, lost in alcoholic dreams.

Some seven hours later the enthusiasm had died down. Many of the passengers slept, some played cards, others discussed in an undertone what they planned when they reached their destination. Already the speedster was decelerating, although so far nothing was visible in the blue-black darkness.

Suddenly a mutter ran along the aisle. Faint, ridiculously small rocket blasts cut the gloom far ahead; a string of all but invisible lights, like a necklace of glowing beads. Clearer and clearer with each second they loomed, as the speedster raced toward them. The shape of a huge ship began to come into view; rows of lighted windows, the occasional thrust of a lazy rocket blast.

The passengers of the speedster were awake now, crowding nearer the windows with ribald jokes and laughter. The sodden young man chose this time to lurch to his feet, glancing at the bearded man. The latter still seemed uneasy, but his exotic companion, clinging closely to him, dispelled his nervousness.

With consummate skill the speedster slid alongside the huge craft. A blazing

neon sign was visible on the big ship's side.

S.S. *FORTUNE*

WELCOME
TO THE
SKIES

Magnetic grapnels shot out, drawing the two ships together. An air-tight, enclosed gangway clamped over the speedster's airlock, and a moment later the eager passengers had boarded the larger vessel.

The glassed-in promenade deck was sumptuous, with its palms, rich carpets and luxurious furnishings. A stocky, black-eyed man with a hirsute blue tinge about his jaw stood smiling at the new arrivals—Capetti, the *Fortune's* manager, whose greeting ceremony was also a check for possible police agents.

The disheveled young man, gaining the promenade deck, glanced curiously about. The big ship, he noticed, rode easily with no apparent motion. Some twenty-eight thousand miles from the moon, approximately two hundred and ten thousand miles from Earth, she lay in neutral gravity and required only an occasional jet from her rockets to maintain equilibrium.

The earth could be seen a great glowing disk far below; but the moon, though close, was invisible, for the sun was behind it and the *Fortune* lay in Luna's shadow.

"Just in time to witness an eclipse, folks," Capetti said jovially. "Take a look! They say it brings good luck at the tables!"

THE newcomers glanced through the double glass windows. The shadow of the moon was passing like some dark specter over the gleaming surface of the earth.

"Symbolic," a suave voice murmured. "Symbolic!"

The bleary young man glanced curiously at the speaker. Lean to the point of cadaverousness, he was darkly saturnine, impeccably attired. A small scar gave an eternal mocking grin to his vulpine face, and the red chafe marks of a Svenson helmet on his neck showed that he had recently spent some time on the airless moon. His smile increased as he caught sight of the rumpled playboy.

"Mr. Ranson, isn't it?" he murmured. "Mr. Stephen Ranson."

"Wrong number," the other hiccoughed. "Name's Henrichs. 'Happy' Henrichs. Best doggone center Yale ever—"

"So sorry," the dark man said. "A startling resemblance."

The eclipse passed quickly, but the ship, so close to the moon, bid fare to remain in its shadow for many hours. In spite of the double hull and heating units there was a chill in the air.

Capetti motioned his stewards to show the new arrivals to their rooms, where they might wash up before seeking the many diversions to be found aboard the *Fortune*.

Upon reaching his cabin, the alcoholic young man threw a coin to the steward, stumbled across the threshold. No sooner had he closed and bolted the door behind him, however, when the pose of drunkenness fell from his shoulders like a cloak. With swift decisiveness he began to examine the room, inch by inch, making sure no microphone or electric eye was concealed about it.

When at last satisfied, he carefully unlocked his suitcase. One half of the bag was taken up by a small but powerful radio. He touched a switch and the special wavelength was open.

"Headquarters?" he said softly. "Ranson. I'm aboard the *Fortune* . . .

Yes, Secretary Napier and the woman are here. He's wearing a fake beard. She's got him eating out of her hand. Listen, one of the guests here recognized me. Tall, dark, thin. About forty, forty-five. Scar at corner of mouth. He's been on the moon recently . . . chafe marks of a Svenson on his neck.

"Don't know . . . Who? Prost? But he's governor of the penal colony! Okay. I'll report later."

Ranson snapped off the set, took a stumpy conversion gun from the suitcase, slipped it into his pocket. To this he added a large bunch of keys and, after some hesitation, a small, yellowish light bulb. Then, locking the stout aluminum suitcase, he peered reflectively through the porthole.

Where the moon should have been, there was still only darkness, since the sun was behind it and the *Fortune* was close enough to the satellite to remain a long time in its shadow.

But Ranson knew what lay upon the invisible Luna—great domed prison camps, where the incorrigibles of the earth were banished; shops, mines and considerable freedom so long as the convicts did not attempt to leave the bitter barren place of exile; dictators and their scientists and other henchmen; murderers, thieves, the criminally insane; and men whose mad ambitions threatened the quiet peace of Earth.

All the evil passions of the earth made a second Pandora's box of the moon. Stephen Ranson alone had added a few to its list of inhabitants since he had been with Terrestrial Intelligence. If someone planned to play the part of Pandora, return these evil geniuses to Earth. . . .

RANSON turned from the window, shrugging. His work this evening had nothing to do with the moon—unless success should enable him to increase its population by further evildoers. And if Prost, the governor of the lunar prisons, wished to spend a few days on the nearby *Fortune* no one could blame him. Gaiety, pleasure were not to be found on the grim bleak moon.

Ranson stepped from the cabin, strode in the direction of the gambling rooms. The corridor was deserted, but as he passed an open doorway leading to the promenade outside, there came a queer hollow sound as of someone drawing a cork. Instinctively Ranson sprang back—and something shot through the doorway, tinkled against the wall of the corridor.

Ranson drew his conversion gun, froze. Faint soft footsteps echoed on the promenade outside, but when he leaped to the door, no one was in sight. Pocketing the gun, he picked up the tiny object that had just missed him. It was a miniature dart, no bigger than a needle, with a little tuft of feathers in its tail. And the steel point was smeared with a greenish paste!

For a long moment the intelligence man studied the deadly little dart. Too small to throw, it must have been blown from a tube of some sort. But who could carry a blowgun aboard this crowded ship? Face tense, Ranson buried the needle in the dirt about a potted fern.

The big gambling rooms of the *Fortune* were crowded. A dazzling modernistic array of chrome and stamped, engraved plastics, they catered to every wish. A buffet table at one end was heaped with sandwiches and hor d'oeuvres, while the long bar offered a profusion of beverages; drinks of every planet, from fiery Martian *tong* to cloudy Neptunian *olo*. The various games of chance were as polyglot as the drinks, but the favorite was obviously the one called "Space," to which Ca-

petti owed the success of his gambling rooms.

A variation of roulette, the big board was divided into squares marked by the names of numerous planets, asteroids, satellites and stars, and upon each square was a globular representation of the heavenly body it stood for. Instead of a rolling marble, the croupier set a miniature space ship spinning across the surface of the table.

Bouncing off one spherical "world" and into another, the little ship finally came to rest on one of the squares which was declared the winner. Should it wind up on the large central square labeled "Sun," the house took all bets.

The crowd about the "Space" table was thick. Ranson could see the saturnine governor of the prison colony, Prost; the bearded Napier and his tawny-eyed companion; and Capetti himself, keeping up his reputation of being a good sport by betting at his own tables. Through an open door beyond, hot multiphone music was audible and scantily clad dancing girls were on display.

Ranson's eyes swept the table. Gamblers, criminals, parasites of every sort —but none of them would have the nerve to attempt murder. Suddenly Ranson's gaze swung to the tawny-eyed woman. In her hand she held a strangely long cigarette holder. A holder that might have served as a blowgun. . . . Lazily the intelligence man lounged toward her.

The bearded man was running in bad luck, Ranson saw.

"Can't win!" Napier muttered. "Damned waste of time! Look! Saturn again! Hell!"

"Leave it to the gamblers," the sleek woman muttered. "Ever try the sanrays? I'm curious as to what they're like."

There was a moment of hesitation.

THE bearded man frowned. "They're dangerous," he muttered. "If I ever got the habit, became an addict—"

"One exposure won't make you an addict," the woman laughed. "And as long as we're here, we ought to try all the stunts. Come on, Naps! Just once!"

Ranson's eyes narrowed. His assignment had been to watch over Napier; but the latter seemed completely under the sway of this sensuous, golden-eyed woman. He should be warned. Hastily Ranson tore a piece of paper from his notebook, wrote:

A beard is not enough, Mr. Napier, to disguise the Secretary of the Space-Navy. The fleet depends upon your orders, and Earth depends upon the fleet for its safety. Your present companion is dangerous. Meet me on the promenade, near the door opposite the bar, and I will explain.

Folding the note carefully, Ranson gave it to a messboy with instructions to hand it to the bearded man. Then, very carelessly, he stepped out onto the promenade deck.

Staring idly through the doubly insulated glass, Ranson's eyes probed the bitter blackness of space. Some game was being played aboard this gilded, glittering hell-ship. The Secretary of the Space-Navy had been lured here for some specific purpose. But why—and who was behind it all?

Simple blackmail or robbery could hardly be the cause; Napier was not a rich man. Clearly the motive was greater. The vast armada of sleek, gleaming space cruisers that Earth had so laboriously built for its defense were under the Secretary of the Navy. But who could be behind the scheme? Mars was completely, rigidly under terrestrial rule. And the primitive beings of Venus were too uncivilized to hope to attack Earth.

Suddenly Prost's words, on seeing the shadow of the moon over Earth during the eclipse, returned to Ranson's mind.

"Symbolic!" the dark saturnine man had said. Luna's shadow over Earth . . .

Soft footsteps sounded along the deserted promenade. Napier had received his note, apparently. Ranson turned—and dropped to the deck. The blast from the conversion gun passed above him, struck a girder with a blinding flash of light.

A chill like a breeze from an iceberg gripped Ranson. The conversion gun's rays transformed all heat, in any object they struck, to light. Had the beam struck him, he would have been frozen stiff in an instant. But before the man could fire again, Ranson hurtled upward from the floor. His head cracked under his assailant's jaw and the man went down without a whimper.

Swiftly Ranson tore the tie and belt from the inert figure, bound him securely, and deposited him in a deck chair. A drunk, passed out, anyone might suppose. He was, however, one of Capetti's bodyguards—which meant that the note to Napier had been intercepted, or that the Secretary of the Space-Navy was in the plot.

Ranson cursed himself for not having delivered his warning in person; though that would have been impossible with the tawny-eyed woman sticking so close to her prey.

Ranson stood for a moment motionless. The hiss of the conversion gun had been drowned out by the torrid multiphone music, and its flash had apparently gone unnoticed. With studied carelessness he pushed open the door, entered the gambling rooms. Capetti and Governor Prost were not there, nor were Napier and the woman. Ranson recalled her urging the Navy Secretary to try the san-rays. If they ever got the Secretary under those damnably soporific rays! Ranson strode quickly through the crowded room to the elevator outside.

"San-ray room!" he snapped at the operator. "Hurry!"

AT first glance the big room on the deck below seemed more like some hospital clinic than a den of vice. Completely circular, cloaked in gloom, its walls were divided into tiny cubicles, each separated from the other by a flimsy partition some four feet high.

Every cubicle held a luxurious, silk-draped divan, and in the wall at the head of the divans, a curious tangle of mechanism was visible. These were the san-ray projectors* which poured their thin yellow light over the limp forms lying on the divans.

Ranson glanced about the big room. Men and women lay upon their divans, some sighing ecstatically under the nerve-tingling ray, some lost in queer disordered dreams; and some in the last stage, that of the deep sleep of nervous exhaustion.

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* The san-ray was the discovery of Dr. Samuel Andrew Nolly, who used his initials as a name for it. Stimulating to the sensitory nerves of the human system, it produced a delightfully caressing sensation that was at once as exhilarating as a cold shower and as soothing as a massage.

Under its rays' thought was impossible, only sensation remained, along with queer opiumlike dreams which clouded the brain until the user at length fell into a sleep of nervous exhaustion. At first hailed as a great nerve stimulator, the true effects of the san-ray soon became apparent.

To begin with, it was as habit-forming as a narcotic; the nerves, let down after the strange tingling vibration, cried for the ray's soothing titillation. After a time, the lips and nails took on a yellow hue, and the overstimulated nerves of the body began to break down under the forced activation.

When completely broken down, there were two outcomes for the san-ray addict—complete paralysis, with the overstimulated nerves refusing to convey further feeling; or, worse still, madness.

Small wonder the san-ray had been forbidden, outlawed, banished to this hell-ship which lay beyond all law.—Ed.

Ranson signed a slip at the door—no money was required until the guest was ready to leave the *Fortune*—and moved into the semi-darkness. On a divan at one end of the room lay Napier, smiling vapidly under the yellow glow. In the cubicle at his right was the sleek, voluptuously beautiful woman. The san-ray projector in her booth was not turned on, though Napier could not see that.

Knowing full well that the woman had seen him, Ranson entered the cubicle on Napier's left. Here, under pretense of adjusting the ray-projector to his liking, he drew from his pocket the little yellow bulb that he had brought for this purpose and substituted it for the one in the set.

A simple, yellow-hued electric bulb, it would give the appearance of the san-ray without the effect. Stretching out beneath the golden light, Ranson smiled in simulated ecstasy at the weirdly painted ceiling.

He had been there perhaps ten minutes when he heard the sound of stealthy footsteps. The tawny-eyed woman, still clad in her tight green cellotos gown, stood before his cubicle staring at him. The long cigarette holder was held in her tapering fingers, and Ranson wondered if it held a poisoned dart.

But instead, the woman fitted a cigarette into place, lit it, extended the glowing tip toward Ranson's hand. Then he understood. San-rays, caressing the nerves with pulsating pleasure, made the sensation of pain all but impossible. Ranson steeled himself, muscles rigid.

The tip of the cigarette touched his hand—and by a fierce effort of will he did not move! The sleek siren nodded, satisfied that he was securely under the ray's influence, and left the room. When she returned a moment later, she held a sheaf of papers in her hand.

RANSON watched her through slitted eyes, saw her approach Napier's cubicle. She snapped off his ray-projector and the Secretary of the Space-Navy stirred uneasily.

"It's all right," the woman whispered soothingly. "I'll turn the ray back on in a moment. You forgot to sign a check for the treatment. Just a formality. Here."

Napier muttered incoherently, and there was the scratching of a pen. The tawny-haired woman snapped on the ray once more and headed for the companionway leading to the upper deck. Hardly had she left the room when Ranson was in pursuit. What had the drugged Napier signed? And to whom was she taking it?

The attendant at the door stared at him curiously. Few men could remain fifteen minutes under the nerve-rays, then get up and walk. Ranson brushed by the man, set out after the mysterious woman. Far ahead along the dimly-lighted passage he could see her green dress shimmering; the faint maddening perfume she wore drifted back along the corridor.

Then abruptly she halted before a doorway, knocked. Ranson could not see who opened it to admit her. Very cautiously he approached the door, placed his ear against the panels. A man's voice was faintly audible.

"You had no trouble in getting him to sign, Magda?" he was saying.

"None." She laughed cynically. "He won't even remember. And he'll be out at least four hours. So will the intelligence agent."

"I still don't understand about him," the man muttered. "Toller was detailed to remove him, after you failed with your darts. And after overcoming Toller, he deliberately falls under the in-

fluence of the san-rays. Well, he's out of the way for a while!"

"What next?" the woman chuckled.

"Next, Magda, the moon strikes! This order, signed by Napier, will send the fleet to Luna on a routine cruise. I, as the faithful governor, will be there to meet them. They will take on oxygen, from the storage tanks at Tycho—only instead of oxygen, it will be chlorine gas!

"The entire crew of the ships will die! And then *we* will take over the terrestrial fleet! The space ships will return, apparently from their cruise, but when they are above Washington they will blast it into submission! All Earth shall be ours!"

Listening, Ranson went rigid. Prost, the governor of the lunar prison colonies, leading a revolt! And the vicious criminals, the mad geniuses, the bloodthirsty dictators, who had been banished to the moon, would take over peaceful Earth! A reign of terror, of awful revenge on those who had exiled them! And the simplicity of the scheme assured its success! Unless—

"Raise your hands!" the voice was dangerously soft. "You're covered!"

Ranson whirled. Capetti stood behind him, conversion gun in hand. So intent had Ranson been on the conversation within the room, that he had failed to hear the manager of the *Fortune* approach.

"Okay." The intelligence agent grinned. "So what?"

"You'll see." Capetti, keeping him covered with one hand, tapped on the door. It was opened. Prost and the tawny-eyed Magda gazed in amazement at the two men.

"Ranson!" Prost muttered. "I knew it was foolish to hope he'd go out under the san-rays! Well—" he grinned in vulpine fury—"this time there'll be no mistake! Bring him in!"

CAPETTI forced his captive into the cabin, and the woman locked the door. The stocky little manager of the pleasure ship took Ranson's gun from his pocket.

"He was listening outside the door," Capetti said. "Heard whatever you were talking about."

Prost's saturnine face darkened. Suddenly he grinned, pointed to a circular steel plate in the wall.

"How about the escape port?"

Ranson's eyes narrowed. Each of the cabins was fitted with an escape port, a miniature airlock. In event of a crash or fire, the passengers had only to don space suits to escape into the void, where possible rescue ships might pick them up. But if one were forced through without a space suit—

"Good enough!" Capetti chuckled.

He swung open the airtight plate, revealing a cylindrical space in which one person might lie.

"It all works automatically. When this inner door is closed, the outer one opens, then shuts again. The rush of escaping air forces the person in the lock out. In you go, wise guy! Now!"

Ranson took a step toward the open airlock. Death from bursting lungs in the bitter void! Even the instantaneous death by freezing from the conversion gun would be preferable. Very faintly he could hear the excited voices from the gambling room, the beat of multiphone music.

Earth people laughing, playing, while the shadow of the moon hung menacingly over them! Laughing, when in a few days the horde of criminals, killers and madmen from the prison colony would control their very lives!

"Into that lock!" Capetti barked. "Or you go in dead!"

"Wait a minute!" Ranson drew a pack of cigarettes from his pocket. "I may make a little deal with you, for

certain information you could use."

The golden-eyed woman, lying back upon the bed, shot a glance at Prost. A glance, Ranson realized, that indicated they might learn what he had to say and *then* dispose of him! He moved slightly, until a wastebasket, heaped high with paper and discarded celluloid vivavox strips, was between him and Capetti.

"Well?" Prost snapped. "What've you got to tell?"

Very deliberately Ranson lit his cigarette, then quickly flipped the match into the wastebasket—and plunged desperately to one side. With a shout of alarm Capetti pressed the trigger of the conversion gun—but it was too late! The celluloid and paper in the scrapbasket had roared up in a pillar of flame.

Had the beam from the conversion gun struck Ranson, it would have converted all his bodily heat into light, left him a frozen corpse. But the leaping flames lay athwart the deadly discharge, and though the ray transformed the fiery tongues into an instantaneous flash of cold white light, that moment was all Ranson needed. Snatching up a heavy bronze ashtray from the bureau, he let fly at the *Fortune's* manager.

Capetti fell like a stone; the gun slithered under a bunk. Prost and Magda sprang to their feet, but before they could draw guns of their own, Ranson had torn open the door and leaped into the corridor beyond. An instant later he had rounded a corner, was racing toward the main gambling hall.

It was obvious that Capetti's entire crew must be working under Prost's orders. But if the crowd of terrestrials about the gaming tables were aroused, there *might* be a chance of taking over the ship . . .

HIS lean face as hard as granite, Ranson burst into the big saloon, slammed and bolted the massive doors behind him. The several hundred smartly dressed men and women at the tables turned to stare as he entered, and the croupier swept money into his cash drawer and locked it.

"Listen, everyone!" Ranson sprang onto the "Space" gambling table. "We're in for trouble! Capetti and certain others aboard this ship are plotting a revolt in the lunar prison camps! They've forced the Secretary of the Space-Navy to order the fleet to the moon, where they'll take it over and invade Earth. They'll do this unless we can gain control of this ship, stop them! Some of you must be armed, and—"

Riotous laughter, angry shouts drowned his words.

"Drunk!" "He's nuts!" "Throw the screwball out and get on with the game!"

Ranson stared at them hopelessly. Laughing, enjoying themselves, refusing to believe! Dancing on the brink of the precipice! When Prost unleashed his horde of criminals, murderers and madmen from the prison camps to harry, conquer and destroy . . .

Again he fought to make himself heard, but the shouts of the gathering drowned him out, and angry hands reached up to pull him from the table.

Ranson was still trying to make the drunken, pleasure-bent crowd listen when there came a hammering at the doors. A blast from a conversion gun chilled the steel locks to crystalline brittleness and they shattered under a blow. Through the doorway poured Prost, Capetti and some twenty members of the *Fortune's* crew, all well armed.

At sight of them a stunned silence fell over the crowd. Then, realizing the truth of Ranson's warning, a score

of men, suddenly sobered by the appearance of danger, rushed toward their assailants.

The gesture was gallant but hopeless. The conversion guns in the hands of Prost's followers hissed viciously and a series of blinding flashes went up as heat was transformed into light. A terrible chill filled the ornate gambling rooms and Ranson, who had leaped forward with the others, saw a ray lash past him. Though it missed by several inches, the cold was so intense that he felt himself go numb. He toppled, blue-faced, to the floor.

Others were not so fortunate. The gambling lounge was a shambles. Here a hard-faced gambler, mouth open, hand clutching his chips, was frozen into a statue, cold, rigid, lifeless. Here a slim girl, brushing against a metal chair that had been struck by a conversion gun's blast, screamed in agony, her bare arm mottled by cold-burns.

Here, most terrible of all, an elderly pleasure-seeker, falling face forward as the heat-dissipating ray struck him, shattered into frozen red chunks, just as a rubber ball dipped in liquid oxygen will become as brittle as glass.

Throughout that terrible five minutes, the multiphone in the adjoining ballroom kept up its saccharine melody. Like some feverish delirium, Ranson thought, as he lay helpless.

"Mars . . . stars . . . love like ours," the multiphone warbled—while conversion guns snuffed out life and frozen corpses shattered like chinaware!

Prost, calmly watching, gave the signal to cease firing. The room was like an icebox, and fully a hundred dead and wounded lay upon the richly carpeted floor. Numbed, shivering, Ranson drew himself erect. Through the portholes he could see Earth, a vast blue-green disk against the black star-studded sky. People were working there, building, living their daily lives, unaware of the terror that was to descend upon them from the moon.

ALREADY, perhaps, the order signed in foolish befuddlement by Navy Secretary Napier had been televized to the fleet, pictures taken of the viewscreens upon which it appeared, and the signature pronounced genuine. And when the unsuspecting fleet landed after its "routine" trip to Luna—

"Napier will go with us in the shuttle cruiser," Prost said. "Take these"—he motioned to the stunned crowd of pleasure-seekers—"below. It'll look like an accident."

The *Fortune's* crew gave a quick "Aye, aye, sir!" and, conversion guns in hand, shepherded their prisoners from the gambling rooms. Ranson, stumbling half-numbed, along with the others, tried to piece things out. To slaughter everyone aboard the ship, to remove the vessel from its accustomed place in the heavens, would bring an investigation by the Space Patrol.

But for the rebels to leave the *Fortune,* escape back to the moon aboard the speedster, would permit those left aboard the big luxury space liner to warn Earth and the fleet what was planned.

What had Prost meant by saying it would look like an accident?

Downward, through rococo corridors, through luxurious cabins, the crew forced their captives. A small metal door, an iron ladder, led to the dark shadow supply hold of the vessel. A command from Capetti sent the terrorized victims down the ladder. Gaily garbed girls, grim-visaged gamblers, dough-faced playboys, jittery san-ray addicts—one by one they descended the rough iron ladder to stand shivering in the cold gloomy hold.

Prost, Capetti and the exotic Magda, a triumvirate of evil, stood at the head of the ladder.

"No doubt," Prost said sardonically, "you are interested in your fate. It will be an unique one. This ship, as you know, is in the belt of neutral gravity between Earth and Luna. Within a few moments my men are going to remove the breech blocks from every rocket tube aboard, rendering the ship absolutely powerless.

"We will then enter the speedster, push the *Fortune* a short distance toward Earth. Once under the influence of terrestrial gravity, you will begin to fall, picking up speed as the gravity increases. Happy landings! I'll put up a soap monument to you when I'm dictator of Earth! The rains will wash it away!"

A horrified silence fell over the hundred terrestrials in the hold. Ranson's face went hard. To plunge toward Earth, out of control! Condemned to sure death—and no way to warn Earth of the Moon-terror that was about to invade and conquer them.

The little manager of the *Fortune,* Capetti, laughed mockingly at the terror on the faces of his victims, while Magda, clinging to Prost's arm, gave a red-lipped smile of amusement. Then the iron door clanged shut, closing them within their prison.

Ranson glanced about the big hold. They were in the conical stern of the shop, and the huge keel, running from end to end of the great cigar-shaped vessel, cut through the center of the hold like the center-pole of a tent.

In spite of the *Fortune's* double hull, the bitter cold of space seeped through and there were no heating units to warm the air. One side of the hold was stacked high with canned goods, cases of liquor. Near the foot of the ladder were large drums of copper wire, magnetic grapnels to be used in emergencies.

The *Fortune's* lighting plant—small but powerful uranium-run generators—lay near the tapered tail of the ship. Nothing there to be used as propulsion—and no way to construct rocket tubes if there had been.

THE clang of hammers, echoing faintly through the hold, told that Prost's men were already removing the breech blocks from the rocket tubes, rendering the ship helpless.

Another hour and they'd be derelict; and then the little tender, with Prost, Capetti, Magda and the captured Napier aboard, would push the larger vessel toward Earth, watch it slowly gather speed as gravity caught and plunged it toward destruction.

An accident, Earth would believe. And Prost's secret would die with the ship. . . .

Ranson peered through one of the small portholes. The moon was still invisible, for the sun was behind it. The eclipse had long since passed on Earth; but here, so close to Luna, they remained still in the shadow—the shadow of the moon! Earth, too, lay beneath the moon's shadow, though in a metaphorical, rather than a literal sense.

The great dome-shaped prisons that dotted the cratered terrain, would be seething with activity. All that distorted, perverted genius—the bloodthirsty madmen, the evil forces that Earth had banished to the moon—would be preparing for the visit of the Space Fleet under Secretary Napier's unknowingly traitorous orders.

Post, supposedly loyal governor, would be there to greet them, to supervise the refilling of the oxygen tanks with poisonous gas. And once the crews were wiped out, the exiled criminals

would take over the fleet, head for Earth—and revenge!

A clash of glass broke into Ranson's thoughts. A blue-faced, shivering gambler had knocked the top off a bottle of liquor, was drinking greedily.

"Ah!" he muttered. "Warms you! Must be near zero in here!"

Ranson stared at the man, his eyes gray slits. Zero—the man meant zero Fahrenheit—but the outer shell of the *Fortune,* since the moon's shadow cut off all sunlight, must be near *absolute zero.* And at such low temperatures—

"Listen! All of you!" Ranson's voice echoed through the hold. "There's a chance—a vague, almost hopeless chance, that we may be able to get out of this! It'll take work—desperate work—since we've only an hour or less!

"But anyone who's willing to make a fight for life will start wrapping those cooper wires"—he indicated the long cables of the magnetic grapnels—"about the keel! We'll connect the ends with the lighting plant over there and—"

"You're nuts!" A strong-jawed middle-aged man stepped to the fore. "I'm—I was—an engineer! Wrap that iron keel with copper wire, connect it to the light plant and you'll have a magnet—but what good is that? The power is relatively small, and if you think it'll hold and attract that escaping speedster, you're insane! Sheer nonsense!"

"No time to explain now," Ranson snapped. "You don't have to believe if you don't want to, but if any of the rest of you are interested in saving your skins, come on!"

For a long moment there was silence. Then, like drowning men clutching at the proverbial straw, the rest of the gaudily dressed crowd of sophisticates stepped forward in assent. A moment later they were hard at work, playboys, gamblers, painted women, throwing themselves into a frenzy of unaccustomed toil.

Pudgy, pleasure-weakened bodies bent under the weight of the copper cable. Soft hands torn by the hard metal, the erstwhile revelers commenced to wrap the heavy wire about the big iron keel.

IN the little speedster, lying alongside the *Fortune,* sleek, dark-haired Magda kept watch over the unconscious Secretary Napier of the Space-Navy, while Prost bent over the television set. Suddenly the lunar governor straightened up, smiling.

"All okay," he chuckled. "I told them I was speaking from Tycho, that Secretary Napier had arrived for a routine inspection of the space port there. Why shouldn't the Navy Department believe the loyal, hard-working lunar governor?" he sneered.

"I televised Napier's order so they could read his signature. The fleet is on maneuvers not far away and is turning at once for the moon!

"Victory, Magda! Soon the space ships will be ours, then Earth! And with me as dictator . . ."

He glanced impatiently at the huge hull of the gambling ship alongside.

"What's keeping Capetti and the others? We've got to get back to Tycho to greet the ships as they land!"

Hardly had Prost finished speaking when Capetti, followed by the *Fortune's* crew, crossed the air-tight gangplank and entered the little tender.

"All okay, Chief," Capetti grinned. "Not a rocket tube working, the radio smashed, and no peep out of that scared crowd in the hold. Okay?"

Prost nodded. "Cast off!" he ordered.

The crew leaped to obey. The air-tight gangway fell away from the lock,

the cables dropped free. Capetti moved to the speedster's controls and, with delicate movements of the Nansen-bar, set the little tender's nose against the big hull of the *Fortune*.

Slowly at first he opened the tubes, then began to increase the power. Five, ten minutes passed, until Prost, eyes on the gravity indicator, suddenly nodded.

"Good enough," he muttered. "She's under Earth's gravity. Very slight now, of course, but it builds up with the square of the distance. They'll be going at meteor speed before they know it."

Capetti nodded, swung the speedster around to the beam of the falling *Fortune*, paralleled her course with an eye on the instrument panel.

"It checks," he murmured. "Her speed's increasing with each mile. Guess we can say 'good-by' to the old *Fortune*, eh, Chief? Better get back to Tycho and prepare our little surprise for the fleet. We—"

Capetti paused, staring at the gambling ship abeam of them. Every light in its rows of portholes had suddenly winked out.

"Hello! They've been tinkering with the lighting plant and blown a fuse, looks like."

"Excellent." The tawny-eyed Magda smiled thinly. "Less danger of their being spotted by some passing ship. Not that any ship would have reason to board them without a radio S.O.S. Let them go, Capetti—they're finished. We've got more important things to attend to."

The stocky little man nodded, reached for the controls. Up to now he had been parallelling the *Fortune* on her plunge toward Earth. Satisfied now that they must crash, he swung the controls to head back toward the moon. Very ponderously, her rockets straining as though against some intangible force, the tender began to turn.

Capetti frowned. The speedster was using every ounce of energy in her powerful motors, yet seemed barely able to maneuver. The gambler bent down, adjusted the fuel mixture, and the little craft fought her way about to face the moon. Capetti was just wondering what the trouble might be when a cry of stark fear and amazement broke from Prost.

"Look!" the lunar governor, his lean dark face suddenly pale, pointed. "The *Fortune!*"

CAPETTI and the others aboard the speedster stared, wild-eyed. Despite the fact that they had turned completely about, the big gambling ship still lay off their beam—heading, as they did, toward Luna!

"Good God!" Capetti muttered. "It—it ain't possible! How—"

"Head for her," Prost snapped. "We'll go aboard and see what stunts they're pulling on us!"

Capetti swung the controls and with a fighting, straining roar of the rockets, the speedster turned—only to find that the *Fortune*, turning *with* them, remained in precisely the same position off the tender's port beam! Dark, silent, in the shadow of the moon, there was no sign of life aboard the derelict. Yet, however the speedster turned, the *Fortune* lay at always the same distance away and in the same position!

In the glare of the smaller ship's rockets, the luxury cruiser seemed a ghost vessel, a spectral silver shape which clung to them like a shadow.

"Shake her!" Prost roared. "Shake her off! We've got to be rid of her! Quick!"

Capetti nodded desperately. His face beaded with sweat, he spun the controls. Then there began as weird

and wild an exhibition as space has ever seen. Up, down, sideward, the little tender swerved—and always the big *Fortune* held her position as if she had been joined to the smaller ship by a bar of steel.

The speedster's evolutions were reminiscent of a dog chasing his tail, or a man trying to escape his shadow. Rockets flaring luridly, the little craft leaped and gyrated, spun and dove—all in vain. Like the albatross about the neck of the Ancient Mariner, Prost's victims aboard the *Fortune* were as inescapable as death itself.

The space hands on the speedster were white with superstitious horror, bruised, beaten by the frenzied evolutions of the vessel. Prost stared with fierce rage at the big silvery hull that clung to its position like a leech. The painted woman beside him was gray with fear.

"What is it?" she gasped. "In God's name, what is it? There's nothing between the two ships—yet it keeps its position as if it were locked to us! Impossible to land on the moon or anywhere else with that great weight bound to us! And we can't stay out here in space indefinitely! We're licked, Prost! Helpless! And—"

Magda broke off, staring. Against the blackness of the void, scores of tiny rocket blasts were visible, like a swarm of fireflies.

"The fleet! The Space Fleet!"

With hot smouldering eyes Prost stared at the vast array of space power as it swept across the heavens. Suddenly two light cruisers detached themselves from the line, headed toward the speedster. Prost's laugh was like the crackle of broken glass.

"They've seen us trying to shake off the *Fortune*," he choked. "And think we're in trouble! They're coming to rescue us, Capetti! To rescue us!"

THE crowd of terrestrials locked in the *Fortune's* hold stood tense as the door swung open. Then shouts of joy and relief went up as they beheld a lean gray officer in the uniform of the Space-Navy standing at the head of the ladder. Secretary Napier, disheveled but resolute, was at his side.

Ranson, red-eyed and weary, was the last of the captives to climb the ladder. He grinned a trifle wanly at Napier.

"Then you're all right, sir?" he said. "Did we nab Prost, Capetti, and—and the rest?"

"All of them." The Secretary of the Space-Navy nodded. "But—I still don't understand. Why didn't they go back to the moon, prepare their trap for the fleet? What held them so inexorably to the *Fortune?*"

RANSON wiped grime from his brow, laughed, a little harshly.

"Why, the shadow!" he said. "The shadow of the moon! It cut off the sun's rays, and as a result the outer hulls of both ships dropped in temperature to within a few degrees of absolute zero. Took on super-conductivity. Simple."

"But—" Napier began, confused.

"Super-conductivity," Ranson explained, "is a state induced in various metals by very low temperatures. I figured the alloy of the outer hulls of both ships ought to be in such a super-conductive state, with the sun's rays cut off and a temperature of almost absolute zero resulting.

"So"—Ranson motioned toward the copper cable about the big iron keel—"we built a magnet, powered by the lighting units. Not staggeringly powerful, but sufficient under the circumstances. It threw a magnet field about the *Fortune* and the little speedster, too—and the hull of the speedster was a super-conductor.

"Any attempts on the rebels' part to move relative to the *Fortune* was an attempt to cut the lines of magnetic force. Such an attempt would set up a current in the outer hull of the tender, of infinite strength—which in turn created a magnetic field that opposed the motion. With so great an induced current—thanks to super-conductivity *—this magnetic opposition was of infinite value and therefore the speedster was unable to move in relation to us.

"It's one of the first laws of electricity. Just think how difficult the armature of a short-circuited generator is to turn—and here we had no resistance, no heat. And with the lines of magnetic force fanning out from the *Fortune* at all angles, it was impossible to move without cutting them."

Ranson grinned. "Don't blame me. Blame the cause of the super-conductivity—the shadow of the moon!"

Secretary Napier extended his hand, very grave.

"Mr. Ranson," he said solemnly, "you have saved the fleet, saved Earth from domination by all the powers of evil that we have fought so hard to weed out and banish. When I think of how close we came to destruction, enslavement, terror—"

He stared a moment at the floor.

"I—I've learned a lesson," Napier stammered, "a lesson I'll never forget. This ship's going to be made over into a space sanitarium for san-ray victims. And if there's anything I can do to show my appreciation toward you, any reward within my power—"

"There's just one thing I want," Ranson chuckled. "And that's about ten hours' sleep!"

He glanced through a double-paned bull's-eye at Earth, serene and peaceful blue goddess against the black backdrop of space. On Earth, he knew, millions of terrestrials were going calmly about their daily tasks, secure now that the Moon-menace had passed.

Peace again ruled men's lives.

* Super-conductivity, resulting from very low temperatures when various metals are subjected to intense cold, eliminates all resistance and enables a weak electric current to work wonders. Just as a tiny gasoline engine, without the loss caused by friction, could do as much as a more powerful engine hampered by friction.

Super-conductivity eliminates R from the formula $I=\frac{E}{R}$. (Inertia equals energy divided by resistance.)

Lead takes on super-conductivity at six above absolute zero, tin at three and a half, and so on. —Ed.

«THE FIRST SCIENCE FICTION STORY»

ANTEDATING even Jules Verne was the book "The Voyage to the Other End of the World." In all probability this was the first science fiction story ever written and it appeared in manuscript form about 1540 from the pen of an unknown German writer.

In theme "The Voyage to the Other End of the World" simulated Verne's book on rapid communication, "Around the World in Eighty Days." A young noble who had been dabbling in the forbidden arts and sciences, goes the story, was threatened with excommunication by the Archbishop of Paris. The threat angered the youth and he boasted that with his new found knowledge he could travel faster than man had ever dreamed of. The Archbishop sent the church police to arrest the noble but he fled to a seaport town of France where he built a huge ship motivated by heat. In this vessel, the *Forbidden,* with three companions of like mind, reached the New World in three weeks' time.

After numerous hair raising adventures with the natives the heroes escaped thru the use of a fire gun. This seems to have been a sort of bellows that blew forth flames in a thin but fierce stream. The return voyage took about three weeks but this time the adventurers landed in Germany. They were betrayed and carried off to Paris. There accused of witchcraft the four adventurers were burned at the stake.

Circulation of the manuscript once reached either six or sixteen copies but was banned by the Vatican. It came to light again in 1867 but was destroyed, accidentally or otherwise, about 1880. Hartmann's "German Literature of the Fifteenth and Sixteenth Centuries" recounts the story and the fate of the manuscript or manuscripts with considerable detail.—*S. M. Ritter.*

The Achilles Heel

by Raymond Z. Gallun

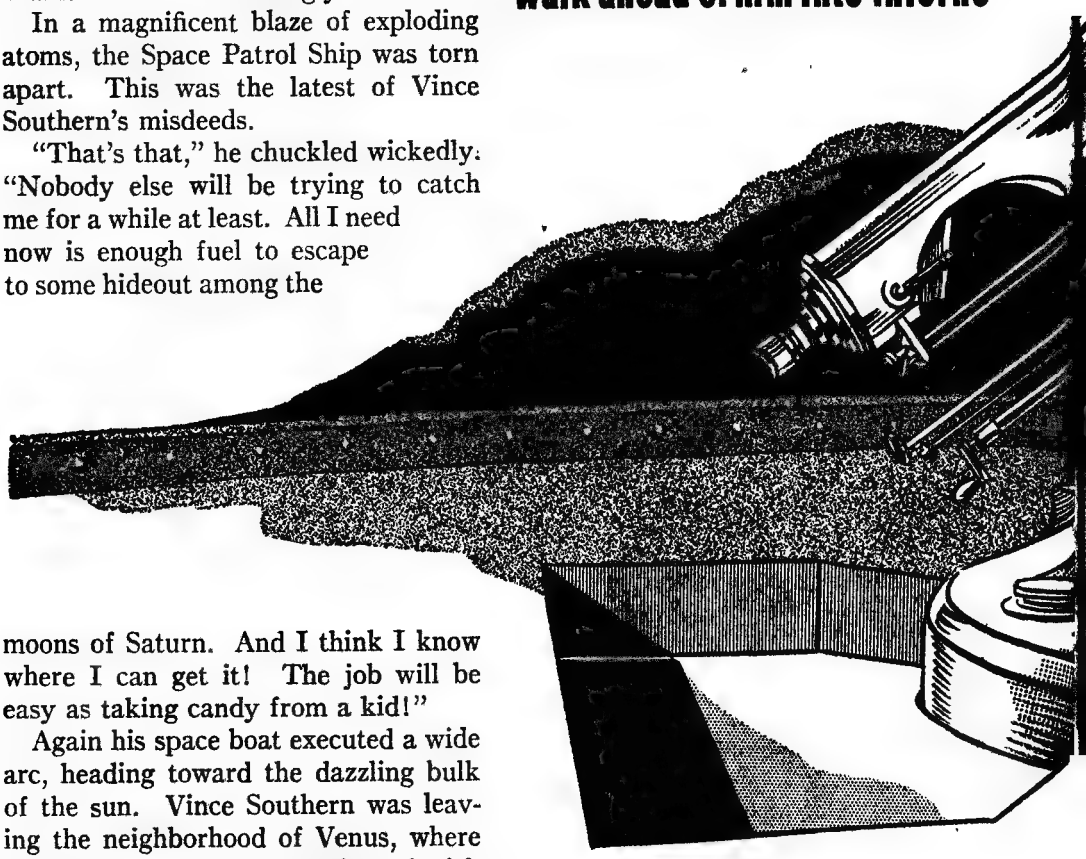
Southern wasn't going to take any chances on getting caught —not he! So he forced the meek little astronomer to walk ahead of him into inferno

VINCE SOUTHERN looped his waspish little space boat around in a wide arc, to get behind the pursuing ship of the Interplanetary Police. He had the advantage of superior maneuverability. Squinting expertly through the sights of his atomic blast weapon, he pressed the lanyard. Flame lanced out dazzlingly in the void.

In a magnificent blaze of exploding atoms, the Space Patrol Ship was torn apart. This was the latest of Vince Southern's misdeeds.

"That's that," he chuckled wickedly. "Nobody else will be trying to catch me for a while at least. All I need now is enough fuel to escape to some hideout among the moons of Saturn. And I think I know where I can get it! The job will be easy as taking candy from a kid!"

Again his space boat executed a wide arc, heading toward the dazzling bulk of the sun. Vince Southern was leaving the neighborhood of Venus, where he'd stolen a huge quantity of rich radioactive salts. Within five hours he was descending toward the eternally sunward face of Mercury, whose almost airless wastes of mountains and plains



Vince Southern bore the scientist brutally to the observatory floor

KRUPA

and extinct volcanoes were heated by the terrific solar rays to a temperature that would have melted lead.

Vince Southern had never visited the planet that was nearest to the sun before, but he had maps to go by and navigation pamphlets to guide him to the exact place which he sought. Checking speed with his forward rockets, he slanted down for a landing. Ahead, in the awful glare of the desert, he saw a low building, lost in that lifeless wilderness. It was the building he sought —the small Solar Observatory of Mercury.

"They'll have a supply of rocket fuel here some place," Southern thought. "The observatory also serves as a space-traffic emergency station. And the best part of it is, I'll get the fuel without having any tough customers to worry about. Just some crazy old hermit astronomer. Joshua Briggs is his name, according to the personnel listing in the pamphlets."

Vince Southern's handsome features twisted into a sneer of contempt. He didn't land at once in the clearly marked area beside the building. Instead he guided his craft low over the observatory, sweeping the latter with a wide beam of powerful waves from a paralyzer gun. Anyone inside the structure would be temporarily rendered senseless.

Having completed this safety measure, Southern glided his ship back on its gravity plates, and brought it to rest on the landing stage. Clad in space armor, he emerged from the cabin a moment later. His helmet face-plate of darkened glass protected his eyes from the awful glare of the sun. A few seconds of exposure to the hellish Mercurian conditions forced no damaging heat through his vacuum-insulated space suit.

He ran to the observatory airlock, worked the knobs to open it. He passed through the double doors to the cool, refrigerated interior of the structure, whose metal walls were heavily shielded against heat by vacuum compartments. Here, Southern explored for several minutes.

HE found the man whom he judged to be Joshua Briggs, the lone attendant of the observatory, lying unconscious beside a worktable littered with solar spectographs. The scientist was a wispy little man with a peculiar mottled scar on his cheek.

Ruthlessly Southern started shaking Briggs, to bring him to his senses. The stunning effects of the paralyzer gun, which disorganized the functions of brain and nervous centers, was always brief. Presently the little man opened his eyes.

Vince Southern had removed his own oxygen helmet, for there was plenty of cool, conditioned air here to breathe. He looked down at his captive with a good-natured but sinister smile.

"I guess maybe you know who I am, Grandpa," he boasted. "I guess maybe you've seen plenty of my pictures, scattered around by my good friends, the police. You know I'm a tough guy, don't you? I suppose you realize that there's nothing for you to do but obey my orders, huh?"

Southern twisted the astronomer's wrist torturingly, just to emphasize his question.

The little scientist winced with pain, but there was a strange, detached dignity in his gaze, as he studied the renegade's thin, sharp-cut features and reddish, wavy hair that streamed with careless charm down over one side of his forehead.

"Yes, I recognize you," Joshua Briggs said at last, speaking quietly from the prone position in which the outlaw held

him. "You're Vincent Southern, wanted for a dozen crimes, including wholesale murder, on Venus, Earth and Mars."

"Right!" Southern snapped, glorying in his exploits. "But don't ever try to high-hat me, Grandpa! Treat me with respect. Do you understand?" The outlaw jerked the astronomer's arm viciously, just to show that he meant what he said.

For a second something vengeful and steely showed in Joshua Briggs' eyes. But pain made his lips go white. Almost losing consciousness again, he wilted, panting.

"That's better," Southern sneered. "I came here to get rocket fuel, so I can make a real getaway to Saturn's moons. I'm going to leave the Space Patrol ships so far behind that they'll think they're chasing a devil's phantom. Now, where is the emergency fuel supply kept, Grandpa?"

Briggs seemed to hesitate. But after a moment he must have recognized his helplessness.

"It isn't stored here at the observatory itself," he said at last. "Rocket fuel, being atomically unstable, gives off certain radioactive radiations. The instruments I use here, to test and measure the magnetic emanations of the sun, are very sensitive. It wouldn't do to have their readings influenced by other radiations. So the rocket fuel is kept in an insulated underground vault, about two miles from here."

Vince Southern knew enough about science to realize that the astronomer probably stated facts. But the outlaw had long ago learned caution, too.

"Okay, Grandpa," he said. "But now listen carefully, and don't tell me any stories. Could I land my space boat any nearer to the vault than this, so that it would be easier to load the fuel? I've been told that there's a lot of fine ash from ancient volcanoes on Mercury—swell stuff for a space ship to sink out of sight in—if somebody happened to land it in the wrong place."

AGAIN Joshua Briggs hesitated, as Vince Southern studied him keenly. "No—you couldn't land near the vault," the scientist finally replied, forced once more to tell the truth.

Southern nodded easily. "Yeah, I thought so, Grandpa," he said. "You would have liked to lie, and maybe trick me into getting my space boat bogged down in a lot of that ash! But you knew better than to lie to me. You knew I'd guess that the fuel would be kept in the most protected place possible to avoid having folks like me take it away from you. But—how do you bring the fuel drums back here to the landing stage?"

Joshua Briggs' withered face worked. "I—I'll show you," he stammered. "If you'll let me up—"

Southern released his prisoner, but kept him covered with a small atomic blast pistol. The old astronomer rose to his feet, and walking with a peculiar rolling gait led the way to a window, fitted with double panes of darkened glass, with a vacuum in between.

Briggs pointed beyond the window, without saying anything further.

Southern peered out across the heat-blasted plain—a skeletal waste of ash and scoria ejected from volcanoes that had been extinct for millions of years. Above the plain, in a dark, almost airless sky, blazed that monster sun of Mercury.

But it was not any of these things that Briggs meant to draw Southern's attention to. The astronomer was pointing at a path, which wound its lonely way out across that inconceivable desert of superheated ash and rock. The path was made up of countless

foot tracks—the marks of space boots.

Seeing those tracks, Southern frowned in puzzlement.

"Oh," he growled after a moment. "I get it. You carry the fuel drums yourself—on foot—whenever it's necessary. You go out in a space suit."

Briggs nodded.

"Then," the renegade observed guardedly, "I could send you out to bring the drums back here to my space boat, eh, Uncle Dudley?"

"You might," Briggs responded.

Southern chuckled deep in his throat.

"I couldn't do anything more stupid than that, could I, Grandpa?" he questioned. "I wouldn't want to leave you all alone and unguarded. You'd probably think up some kind of dirty trick to spring on me. So I guess maybe I'll have to go along with you, just to be sure you don't get any ideas!"

Vince Southern paused, thinking warily, wondering if this little old astronomer was trying to lead him into a trap of some kind.

"Listen!" he said at last, angrily. "You know it's death to lie to me, Uncle Dudley! I know things about space suits, and that they can screen an awful lot of heat away from a man's body. But I've always heard that, even so, it's dangerous to wander around on the sunward side of Mercury—if a fellow happens to wander too far. Let me see that space armor you use!"

Joshua Briggs obeyed promptly, opening a supply cabinet in the wall. Southern took out the vacuum armor hanging there beside several curious umbrella-like sunshades of asbestos fabric. He examined the armor carefully, especially the heavy, insulated boots. It was all standard equipment, exactly like his own space suit.

SOUTHERN gave his captive one final, searching look. But the evidence was plain and convincing. First, there were those tracks out there in the desert, proving that Joshua Briggs often ventured out there into that eternal, blasting sunshine. Second, his own standard make of armor. With a sunshade added to his own gear, to screen off the direct solar rays, Southern would be equipped just as was the astronomer.

"All right," said the outlaw. "Get into your rig, Uncle Dudley, and we'll get that space fuel. With an equal chance, I guess I'm tough enough to go anywhere you can go—even if you do know a lot more about Mercury than I do! But remember—I'll keep right behind you with my blaster, and if you try the least little thing that looks funny, it's your finish!"

Presently, scientist and outlaw were plodding across the desert toward the fuel vault two miles away. In addition to their asbestos sunshades, they carried slings of metal webwork at their belts, with which to transport the small drums of compact but fearfully powerful atomic fuel, which they were going to bring back for Southern's space ship.

Vince Southern kept his captive, who led the way, covered with his blaster. To the renegade, the going didn't seem at all difficult. True, his boots sank deep into the superheated ash of the path at almost every step; but two miles wasn't a great distance, and he didn't mind a little exertion. Carefully he dogged every step old Joshua Briggs took, keeping close to him. That way there seemed no chance for error.

Vince Southern felt cool and comfortable in his space suit, shaded as it was by the asbestos shield he held over his helmet. This much was all logical and in accord with science. The direct rays of the sun were screened away from him, and the Mercurian air, being extremely thin, could not transmit much heat to his armor.

It wasn't till they were a good mile from the observatory that an unpleasant warmth began to seep at last through Southern's insulated boots. Even then he wasn't worried much, however. His captive was still plugging on, the same as ever, just ahead. Evidently a fellow just had to be rugged. . . .

Southern thought optimistically of the future. As soon as he got the fuel, he'd be flying out there toward the moons of Saturn. Wanted men who had enough wealth could live in luxury in certain prepared underground caverns in the little-known Saturnian satellites. They could have their features so changed by plastic surgery that they could come back to civilization, and remain forever unrecognized. Southern had wealth enough, what with all those cannisters of rich radioactive salts he'd stolen on Venus, loaded in his space boat.

He even smiled sardonically at the thought of killing Joshua Briggs when the old man ceased to be useful to him. Maybe Briggs thought he was going to be spared. Well, let him keep his illusions! Southern always had believed in playing safe, and dead men told no tales, particularly dead men whose corpses were dissolved to powder by an atomic blaster!

But now the outlaw's sadistic reveries were broken off by real alarm. That heat in his boots was increasing with every step! Scorching pain in his feet grew rapidly—becoming real torture! A dizziness of agony swirled in his brain.

IN dumb, uncomprehending confusion he stared at Joshua Briggs' back, just ahead. The aged astronomer was still plodding on unruffled, betraying not the slightest hint of discomfort. How could this be when they had identically the same kind of space armor and sunshades—the same identical protection? Southern had been careful; the old fool could never have played a trick on *him!* There was no way for him to do so!

But there must be a trick—there had to be—even though he couldn't possibly guess what it was! Those foot tracks in the path, showing that Briggs had come this way hundreds of times before, just as he was doing now, were certainly bona fide. And yet the first time he, Vince Southern, who was as tough as anybody, tried it, he was tortured to the verge of fainting. In a minute he'd collapse in that hot dust, helpless!

Filled with hate and lust for vengeance, Southern began to squeeze the trigger of his blast pistol. But terror conquered his urge to kill Joshua Briggs. He'd be left alone then, to die slowly, hideously!

For he could grasp the facts now, relative to his own position. Space suits were a very effective protection against heat; but they had a weak spot—an Achilles heel. Shaded from the direct rays of the sun here, they could scarcely be penetrated by the weaker, reflected heat waves of the surrounding desert. But when any *part* of them—the boots, for instance—came into actual contact with something hot enough, heat conduction started working, slowly penetrating insulation.

Southern's space boots were in contact with the sun-blasted ash of Mercury, heated to a temperature that would have fused many of the less refractory metals.

That was why Vince Southern's feet seemed afire. He could understand why it was so now. What he could not understand was the thing he had banked his judgment on, before he had ventured out here on this path of space-boot tracks.

Those tracks had proved that Joshua

Briggs was immune to the danger, and Southern had expected the same immunity for himself. Joshua Briggs' immunity was completely evident now, as he continued to plod on, unruffled and undisturbed, toward the low ridge of rocks, still almost a mile ahead, beneath which the fuel vault was located.

But what was the secret of the astronomer's freedom from doom here? Southern could not think of the ghost of an answer.

Agony increased second by second. Southern's mind was getting dim. Blood seemed to hiss and roar in his head. He staggered, trying to balance his weight on one foot and then the other, as he executed a grotesque torture dance. All around, the devilish glaring wastes of Mercury seemed to wait inscrutably for their prey.

Vince Southern raised his blast pistol again toward Joshua Briggs. But the effort at revenge was lost in the half-crazed confusion and terror of his thoughts. Instead of squeezing the trigger, he lunged furiously at the little astronomer.

Briggs, who must have long anticipated some such move, dodged aside easily. He faced the renegade and his menacing weapon.

"Damn you!" Southern roared into his helmet radiophones. "What have you done to me, you devil? What have you led me into? You're going to die for this doublecross, Briggs . . ."

SOUTHERN'S voice was a whining shriek at the end. He could smell his own flesh burning now. It was horrible, horrible.

But Briggs remained calm. His features were faintly outlined behind the dark glass of his face-plate. Maybe his steadiness made him seem a little like a superman—a creature who was no longer quite human after having spent so much time in the hot furnace of Mercury's sunward hemisphere.

"No, Southern," he said, speaking through his phones. "You won't kill me now. You see, I'm the only person who can save you from slowly roasting alive. Without me, you couldn't take ten more steps. You've destroyed many lives, Southern. You're a condemned man. But the euthanasia chamber provides an easy death. Now will you hand over your blaster?"

Tremblingly, and without another word, Vince Southern obeyed. Yes, the euthanasia chamber seemed a boon now—a relief from hellish torture. He was barely conscious as Briggs tied his wrists behind his back with a metal cord taken from his own equipment, and began to carry him back toward the observatory.

In the building's cool interior, Southern submitted to first-aid measures. His feet were masses of ugly, charred blisters. But Briggs, who had tied the outlaw securely to a refrigeration pipe, doctored the injuries expertly.

Vince Southern was the first to speak.

"How did you do it, Grandpa?" he asked dazedly. "How come you didn't get the same hot-foot I did? I can't understand it. What's the password?"

Joshua Briggs smiled apologetically at the confused and truculent badman.

"Password?" he repeated. "Well, I got acclimated to Mercury. A long time ago I spent an hour out there on the desert. I didn't know any better then. I walked too far, and the heat soaked through my boots. I couldn't walk back; but I managed to stay alive by leaning against some rocks, and by keeping in the shade as much as possible.

"Bixby, my boss then, picked me up in a small space boat. I spent a long time in the hospital."

Briggs had gotten out of his space

suit. He pulled up his trousers leg.

"The doctors had to amputate above the ankles," he said simply.

Vince Southern, a captured renegade extraordinary, stared dumbly at a pair of neat artificial limbs, made of asbestos fiber, which not even the searing dust of Mercury could damage.

THE END

The Scientific Pioneer Returns
(Continued from page 107)

an' physics worked in reverse. Anti-gravitational beams attracted, and propellors repelled!"

Biggs sighed. "And I've always considered myself a logical man! What you did was turn on every available ounce of energy and thrust the *Saturn* at full speed *toward* the planet, realizing that for every action there is an equal and opposite reaction, and that the planet's terrific repelling force would throw us completely back out of negative space—is that it?"

Hank gazed at him admiringly.

"I reckon," he said softly, "that's about it. But you sure explain it purty . . ."

SO why go on? We got into the machine, then. Hank and Helen and I. And again things began flickering. And at the last minute, I remembered there was something I wanted to ask Biggs, but it was too late then, for there came another moment of giddy spinning, fireworks in my eyes and butterflies in my tummy, and then—

We were back in my apartment. And it was broad daylight, but my radio was still on, as I had left it, and already it was blatting a news item about how Prof. Hallowell had inexplicably returned. There'd be other flashes later, I knew. And a lot of explaining to be done to an unbelieving public . . .

THEN I said, "Damn!"

"Yeah?" said Hank. "Why for, Jim?"

"Something I meant to ask Biggs and forgot. But you can tell me, I guess. One thing I never did understand, was why Biggs got so excited when he found out you and Helen were not married. What difference did *that* make? Why did that cause him to show such great confidence that we were going to pull out of our jam?"

Hank flushed. "Well, you see—" he hesitated.

"I don't. But I'm listening."

"Well, it was this way. Soon as Lanse learned me an' Helen wasn't hitched, he couldn't help knowin' everything was gonna be all right. On account of it warn't logical her an' me should git kilt *before* we was married an'—an' had a youngster . . ."

His face was flaming. But I was inexorable.

"I still don't get it. Why not? Why wasn't it logical?"

"Aw, durn, Jim—don't you see? Because Biggs knew that much o' my 'history.' That is, my future, to me, is my *past* to him. He knew who I'd married, and that me an' my wife had a youngster, an' consequently if them things hadn't happened yet, we was bound to live an' make 'em happen!"

So it finally sank in.

I said, "Golly! You're right—as usual! But wasn't it a lucky break that Lancelot Biggs happened to know something about your history, Hank? Your name must be pretty well known to the men of the future—"

Hank writhed in embarrassment.

"Well, now, I wouldn't 'zackly say that, Jim. Lanse knew about me, yes. But then, he'd be likely to. Him an' me bein' related, so to speak—"

"Related!"

"Yeah. Spoke to him 'bout it later.

Y'see, Lanse is a sort of grandson o' mine, with a lot o' great-greats on the front of it—" He gulped and looked at Helen miserably. "I—I'm afeared they ain't nothin' we can do 'bout it, Helen. Lanse says you was his great-great-grandmammy!"

And then Helen MacDowell — smiled! And it was the kind of smile I hope to see some time on the lips of a woman looking at me. And she said, very softly,

"There's no sense in fighting fate, is there, Hank? What must be, must be. And there *is* something we can do—to make the future happier . . ."

Aw, hell! I promised Helen she could have him alone in a dark room, didn't I? So I said good-by.

I don't think either of them heard me. In fact, I'm sure of it!

Treasure Trove in Time
(Continued from page 57)

Gail Lee, looking with infinite alarm at Malcolm Mace, was never closer to being correct in the assumption that the man was slightly off balance. For Malcolm Mace, the one person in the world who had any idea of the value of that plate, was giddily approaching madness as he watched it dangle tantalizingly over the cement walk in the enclosure.

"Mace," Foy shouted from his perch, "what do you want with this plate? It might not even be any good on the squirrels. It's been drenched by developing fluids and chemicals."

"I'll show you what I want with it," Mace babbled frenziedly, "by offering you twenty-five thousand dollars!"

He reached into his pocket and grabbed for his checkbook. Gail Lee, wide-eyed in astonishment, but quick on the ball, fished into her handbag and gave him a pen. Hand trembling, Mace bent over a bank draft.

Mike Foy had almost fallen out of his tree from the shock of the statement and the sight of the checkbook. Had almost, in fact, let the plate slip from his nerveless fingers.

"Twenty-five thousand?" It was Foy's turn to croak.

"Okay, okay," babbled the now gibbering Mace. "Fifty! I have fifty thousand, every last cent I own. I'll throw in the business, too. You can have that. *But I must have the plate!*"

Mace was overwrought, he was near complete breakdown, but he was still shrewd. He knew that the plate was worth millions to one knowing its true value. Would be worth many millions if he could but get his hands on it.

"Mike!" Gail's voice was sharp. The woman in her was taking over. "Get down from that tree and make sure you don't drop that plate. Then come over to this side of the cage. You look too natural in there. We have some business to do with Mr. Mace!"

She hadn't the slightest idea in the world of Mace's reason for wanting the plate. Would never be able to figure out what the value of the thing was. But that was all right with Gail Lee.

Perhaps Mace was loony. So what? He had played some plenty loathsome tricks that she knew of, and therefore she wasn't burdened with any scruples concerning his money. If he wanted to pay out—that was his business.

FOY was around to their side of the bars now, brow wrinkled in a sort of eager bewilderment.

"Did he say what I thought he said?" he breathed. "Did he, honey?"

Mace nodded excitedly. "Here's a check for fifty thousand. Give me the plate. I'll turn over the business to you later in the day!"

Foy reached for the check, holding out the plate.

"No, you don't!" Gail had stepped between the two. "We're going back to your car, Mr. Mace. Then we'll drive to the bank, where Mike can get this cashed. After that, we'll go to the office. I'm a notary, y'know, and you can turn over the business to him there after we've drawn up legal papers. Then, and not until then, you can have the plate!"

Malcolm Mace looked at the plate, all the greed and eagerness shining forth from his eyes. Cunning too, however. Hell, what could he lose by a measly fifty grand and a business. He'd already figured out how he could utilize that one plate to make billions.

"You win," he said. "But make Mike let you carry the plate, Gail. He's so clumsy, I'm afraid he'll break it."

And as for Gail Lee, Mace thought as they walked to the car, Mike would probably marry her, what with wealth and a business to offer. But a million or a billion bucks would more than compensate for that. Mace smirked. He was still 'way ahead of the game.

CHAPTER V

Behind the Eight-ball

THREE hours later, Mace left Gail Lee and Mike Foy in each other's arms, planning marriage and whispering sweet nothings. Life was going to be nothing but milk and honey for them —what with fifty thousand bucks and a profitable business.

"But I'm still miles ahead," Malcolm Mace told himself, looking at the precious plate he'd carried away with him. . . .

"Miles ahead, and on my way to untold wealth and power," he muttered again, an hour later in his private camera lab. He had set up his lights, timed the camera exposures. They had to be quick, for he only wanted a glimpse into the *very near* future, perhaps a week or so away.

In front of the camera lens, underneath the glaring studio lights, Malcolm Mace had placed a newspaper. It was the evening paper, just purchased, and he had opened it to the stock market quotation page. The lens was centered on that page, a page of fabulous financial information once the picture was made.

For Malcolm Mace knew that a picture of that page a few days, or even a few weeks in advance, would give him all that he wanted, priceless information!

He inserted the precious plate. Set the lights a bit more carefully, snicked the shutter briefly.

IT was a matter of merely twenty minutes before Mace dashed forth from his darkroom with the precious developed print. The developed print that would show the financial page a few days or weeks in the future.

His hands trembled as if with ague, and his throat was choked and dry, filled with cotton. His heart hammered sickeningly against his ribs, while he placed the developed print, an enlargement, beneath his desk lamp.

Mace shuddered uncontrollably. It was like holding billions, holding that print.

He forced himself to gaze down at it, gaze down at his future revealed in a photograph.

Malcolm Mace opened his eyes—he had shut them in a brief instant of prayer—and looked at the developed print. It was an exquisite piece of photography, vivid in every last detail. Vivid even to the date at the top of the financial page.

For it *was* the financial page, of course. *(Concluded on page 140)*

DISCUSSIONS

AMAZING STORIES will publish in each issue a selection of letters from readers. Everybody is welcome to contribute. Bouquets and brickbats will have an equal chance. Inter-reader correspondence and controversy will be encouraged through this department. Get in with the gang and have your say.

DONALD BERN HONORED

Sirs:

I've finished reading "The Man Who Knew All The Answers" (Man, what a "horror" of a title). But the story was really good. No kidding.

What I want are stories by Ross Rocklynne. That's the boy who can dish out the science of a type I enjoy.

KAY BENTON,
Apt. 8,
5041 Main,
Norwood, Ohio.

Yes, indeed, it must have been a good story. It has been selected by Phil Stong, for inclusion in THE OTHER WORLD, an omnibus of imaginative fiction to be published by Wilfred Funk, Inc.

We consider it quite an honor to have had the pleasure to present a story with as much merit as this.—Ed.

NOT SO FAR IN THE FUTURE

Sirs:

I liked "Fifth Column Of Mars" in the September issue. I hope by expressing my opinion this way you will see what kind of thing I like.

Could we have others of this kind, only on Earth and more like actual conditions today? I mean not so far in the future?

PHIL MCDANIELS,
935 Burbank,
Burbank, Calif.

Many of our authors try to make their stories as timely as possible, and it isn't necessary to go far into the future to write a bang-up story that is really AMAZING. *You'll get more, never fear, like this one.—Ed.*

WE ARE "RATED"

Sirs:

On the third of August, 12 members of THE SOLAROID CLUB rated the September issue of AMAZING STORIES as follows: (Ratings on a one to ten basis, ten being high)

COVERS: Front cover—2; Back cover—9.

STORIES: "Fifth Column of Mars"—3; "Champlin Fights The Purple God"—4; "X-Ray Murder"—7; "The Man Who Never Lived"—8; "Blitzkrieg 1950"—7; "Synthetic Woman"—6.

DEPARTMENTS: Observatory—10; Riddles Of Science—7; Sports Of The Future—9; Science Quiz—8; Meet The Authors—7; Questions & Answers—3; Discussions—10; Correspondence Corner—7.

INTERIOR ILLUSTRATIONS: 3.

MAGAZINE AS A WHOLE: 7.

GERRY DE LA REE, JR.,
9 Bogart Place,
Westwood, N. J.

Your ratings are extremely interesting. Sadly, they don't agree with the consensus our readers gave as a whole, but we are a bit astonished at your ratings on the departments, because they average 7⅝ as against 5⅝ for the stories. Does this mean you prefer non-fiction?—Ed.

A NEW READER SPEAKS

Sirs:

I have never read AMAZING STORIES until now because I thought your stories were too unbelievable and impossible, as well as trashy.

Now I find it is much better than I expected. I have since tried to read several of your competitors and I can't understand them. Yours seems to be so simple compared to them.

My opinion of your magazine as a whole, follows:

A—You charge too much.

B—Your cover is too lurid—I like the artist who drew the back cover. He is seemingly an up-and-coming young fellow and I think he deserves a front cover.

C—I can't see anything funny in your cartoons.

D—Your "Fifth Column of Mars" was the best story. It serves as a warning to America to be prepared.

E—"X-Ray Murder" was good, but you really shouldn't print such stories for it might inspire a similar crime in reality.

F—I like your idea of publishing readers' letters.

G—"Blitzkrieg—1950!" by Kummer was fine. More by this famous author of mystery stories.

H—Don't you think the Quiz is too hard?

You have now acquired a more or less steady reader and will tell my friends about it. May you have a long life.

L. G. ROSENSTEIN,
2835 Colfax Ave.,
Denver, Colo.

We are glad you think we have a good magazine.

Frank R. Paul, who does our back covers, has been painting AMAZING STORIES *covers for 14 years. So he's more than "up-and-coming"! Frederic Arnold Kummer, Jr., is the* son *of the famous mystery story writer, whose name is the same, except for the "Jr." Some of our readers think the Quiz too easy, but we'll try to make it balance both ways in the future.—Ed.*

PICTURES TO THE EDITOR

Sirs:

For years now I have read AMAZING STORIES, and I have enjoyed all of them very much.

Enclosed is a photograph of what I do with your magazine.

Congratulate Paul for me on his fine work. I have saved and mounted his entire series of life on other worlds and will continue to do so.

What I would like to see is some stories of inter-dimensional adventure. Also give us another time traveling story.

I also enjoy very much your companion magazine, *Fantastic Adventures.*

Thanks for a fine magazine.

ELLSWORTH W. SNITCHER,
2709 Belleview Ave.,
Wilmington, Delaware.

Thanks to you, Mr. Snitcher. We are delighted to have pictorial proof of what you do with our magazine, and it's exactly what we hoped *you'd do with it—read it!*

Ellsworth W. Snitcher

And just to prove it, we are publishing the photo you so graciously sent us.—Ed.

(Continued on page 137)

CAMERA FANS! YOU NEED THESE 20 HANDY PHOTOGRAPHIC TEXT BOOKS!

Whether you are a beginner or an advanced amateur you need the Little Technical Library PHOTOGRAPHIC SERIES at your fingertips all year 'round! Yes, camera fans, with this handy set of 20 pocket-size text books you are assured of authoritative guidance in every phase of photography. Easy-to-read and easy-to-understand, each informative volume deals simply and thoroughly with its chosen subject. Each book is complete in itself, authored by an outstanding photographer, beautifully printed, richly bound, and chock-full of brilliant illustrations. Camera fans, the Little Technical Library PHOTOGRAPHIC SERIES is yours for a well-rounded photographic education!

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No. 9—TRICKS FOR CAMERA OWNERS
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No. 17—PHOTOGRAPHIC LENSES AND SHUTTERS
No. 18—PHOTO TRICKS AND EFFECTS
No. 19—SELLING YOUR PICTURES
No. 20—DARKROOM HANDBOOK, FORMULARY

Little Technical Library PHOTOGRAPHIC SERIES

AT ALL LEADING BOOKSELLERS, CAMERA AND DEPARTMENT STORES

Science Quiz

The following quiz has been prepared as a pleasant means of testing your knowledge of science and science fiction. We offer it solely for the pleasure it gives you, and with the hope that it will provide you with many bits of information that will help you to enjoy the stories in this magazine.

Count 2 points for each correct answer. If your score is between 65 and 75, consider yourself a charter member of our No. 1 I.A.A.W.C.—I Am a Whiz Club. If you score between 50 and 64, join our No. 2 I.A.A.W.C.—I'm Almost a Whiz Club. But if your total is below 50, you belong to the No. 3 I.A.A.W.C.—I *Ain't* a Whiz Club!

TRUE AND FALSE

1. In photography, although the ultra-violet rays cannot be seen, they have a marked effect upon all films. True.... False....
2. Were you to take a picture of a group of people on a beach on a sunny summer afternoon, you would set the camera to operate at 1/25 of a second with the lens opening at *f* 4.5. True.... False....
3. There is a point in the retina of the eye which is not sensitive to light and is blind. True.... False....
4. Of the three radium rays, alpha, beta and gamma, beta has the highest penetrating power. True.... False....
5. Surface tension is the resistance of a liquid to flow under stress. True.... False....
6. The dividing line between the illuminated and the unilluminated part of the moon is known as the terminator. True.... False....
7. Of all the planets in the solar system, Neptune is the closest to the sun. True.... False....
8. Water puts out a fire by cooling the burning material below its kindling temperature. True .... False....
9. Ptarmigan is the visible luminous part of the sun. True.... False....
10. Any persistent dread or fear is known as a phobia. True.... False....

KNOW YOUR PLANETS

Uranus was named after the god of the ....., on the suggestion of Bode. The planet was accidentally discovered by..... ....., who was testing a new telescope. He at first believed that he had discovered a new..... And not until a year later did he become aware of the fact that he had discovered a new planet. He called the planet....., which was dropped in preference to Uranus.

Uranus is the.....planet from the sun, revolving about it at a distance of..... million miles. It has an equatorial diameter of .....miles, and makes a complete rotation in.....hours. Knowing the period of rotation, and that its sidereal revolution is..... years, we find that Uranus has the amazing total of.....days in a year. It has..... satellites, called..... .....

This represents a complete departure from the custom of naming the planets and satellites from classical mythology, as these names were derived from .....literature. Another odd fact about the satellites is that their orbits are inclined almost.....to the ecliptic, and their revolutions are.....

STAR-GAZING

There are stars of all sizes, shapes and combinations. In the left-hand column are several such classifications. In the right hand column are several familiar terms dealing with stars. Can you correctly connect one with the other?

(1) Double star	( ) Pleiades
(2) Triple star	( ) Orion
(3) Multiple star	( ) Andromeda
(4) Giant star	( ) Coma-Virgo
(5) White dwarf star	( ) Alpha Centauri
(6) Planetary nebula	( ) Betelgeuse
(7) Spiral nebula	( ) Sirius
(8) Globular cluster	( ) Companion to Sirius
(9) Open cluster	( ) Big Dipper
(10) Real constellation	( ) N.G.C. 6720
(11) Apparent constellation	( ) Zeta of Big Dipper
(12) Super-galaxy	( ) Hercules

ALL MIXED UP

Most of us know a *solid* has a fixed volume and shape, a *liquid* has a fixed volume but no fixed shape, and a *gas* has neither a fixed volume nor a fixed shape. Easy enough. But do you know what we get when we have a very close mixture of these solids, liquids and gases?

1. Very fine particles of solid surrounded by liquids are ..... or .....

2. Very fine particles of solid floating in a gas are a .....

3. Very fine particles of liquid floating in a gas are a ..... or .....

4. Very fine particles of a gas in a liquid are a .....

5. Very fine particles of a gas in a solid are a ....

(Answers on page 139)

(Concluded from page 135)

THE WORD "FICTION"

Sirs:

These highbrow, pure-science guys are one of my pet dislikes. They seem to forget that the word "fiction" has anything to do with the magazine at all. I am not a literary critic, but I like your stories. However, "Synthetic Woman" was not my type of story. I would like to see more of Jep Powell, though. He is a really good writer.

Unlike many of your fans, I don't pretend to be an art critic. I think I can say, though, that I do like your Sept. cover. In fact, that is what prompted me to buy your magazine in the first place. I like Paul's covers, too.

Robert Riggs, expert on science, ought to be able to understand the footnotes. I believe that they are simplified.

FRANK WILKINSON,
Stockton, Calif.

Undoubtedly, Mr. Wilkinson, you will incur the wrath of many readers who like science, but we think you'll also win favor among other readers who like fiction for its own sake.—Ed.

SCIENTIFIC MYSTERIES

(Concluded from page 59)

the Mayas all record a period when time was first measured by periods of the moon. All these facts imply that at some time within the age of mankind, our present moon appeared and brought about a complete change in human activities.

NEW TELESCOPE HOLDS SECRET

The scientific phenomenon of nutation—that wobbling movement of the earth's poles—could come most logically from a hard blow against our planet. Many scientists now believe that earth's original moon was a tiny satellite far away and that the approach of a comet or some other heavenly catastrophe made that moon fall upon the earth.

This would account for the Flood myths found in almost every race on earth, for the changes known to have occurred in the earth's climatic zones and for the nutation of the earth's axis. At some epoch in the comparatively recent past, either a conjunction of planets or the approach of the huge comet from space upset the equilibrium of the solar system, it is suggested.

As a result of this catastrophe, our present moon appeared and the original satellite was dashed to earth, smashing Lemuria and upsetting every natural law.

But an increasing number of scientists, not only astronomers but physicists, geologists and many others have turned their efforts toward a solution of the Mystery of the Moon. Who knows but what, when the mighty 200-inch Mount Wilson telescope is at last turned upon Luna, we may learn secrets now beyond the realm of belief.

U. S. ARMY BLITZKRIEG RADIO . . .

You can't win a modern war with radio . . . but you can't win one without it! Of all the modern inventions—the airplane, the camera, the gasoline motor, the rapid firing weapon — it is doubtful if any has been more integral a part of the new way of battle than the radio. Read how the U. S. Army, as part of its modernization and expansion program, is investing millions of dollars in radio equipment and enlisting thousands of men to operate it. You'll find this timely, authoritative article beginning on page 8 of your

OCTOBER ISSUE

RADIO NEWS

On Sale At All Newstands

Meet the Authors

DAVID WRIGHT O'BRIEN Author of TREASURE TROVE IN TIME

I WAS born on the back of a racing camel in the middle of the Gobi Desert, and by the time I was four years old was peddling papers in the streets of Port Said and had taken to drink.

My friends said I had no future.

On my sixth birthday I met my first dancing girl. Her name was Lola and she worked in the notorious Cafe Roue, a joint run by my great-uncle, Ben Abu. I wanted Lola to run away with me and every night we'd munch opium krispies and discuss means of escape. She's still there.

My friends said I was all washed up.

Taking the bulrushes by the roots, I faced the facts. Here I was, seven years old and a failure. Of course I held the rough-'n-tumble, catch-as-catch-can championship of Middle-Arabia. But what does untrained muscle amount to, anyway? I couldn't go on like that forever.

I put in my application with a troupe of whirling dervishes, and one month later, having passed my examination, entered a monastery.

But once again Fate kicked me in the stomach. It seems that the monk factory was one of those cloistered joints. Everything done behind high wall. What fun was there to whirling if no one could watch? Dizzy and disillusioned, I resigned.

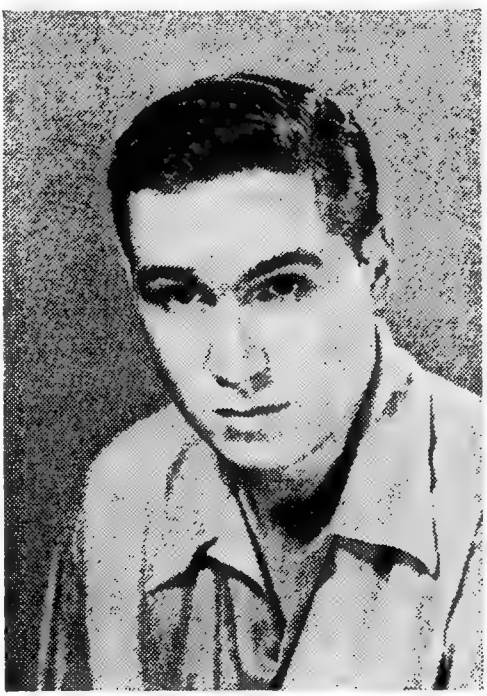
My friends were now openly pointing the finger of scorn. The world flew 'round the opium parlors, "O'Brien has gone phfffft!"

At ten years of age I couldn't stand it any longer. I came to the United States to seek my fortune. After working the Union Pacific Line as a candy butcher and inventing the electric light —oops, sorry, that was Edison . . .

As I was saying, I came to America, and subsisted for weeks on nothing but the crumbs I was able to scrape out of the bottoms of New York's automats. It was ghastly, and there were times when I was almost desperate enough to look for a job.

But enough of the sordidness of my early childhood! Enough of the stark truth and grim reality! Let us continue in a lighter vein. Let us, just for the sheer hell of it, skip a few years.

I found myself in Chicago, entering Loyola Academy in search of education. Under the tutelage of the football mentors, I spent four years learning how to clip the legs out from under a defensive half-back and whistle at pretty young things on street corners.



DAVID WRIGHT O'BRIEN

Having a firm grip on culture, and practically none at all on myself, I got a job as a police reporter. This led, quite naturally, to a position digging ditches.

Deciding to take a whack at "higher" education, I left my shovel and entered a local institution celebrated as being the only kindergarten in the nation awarding college degrees.

The "college" dropped football, throwing me and a number of other subsidized slap-happies off the payroll. After a merry interchange of insults with the Dean, who hated ever itsy-bitsy intestine in my anatomical structure, I bid adieu to the dump.

Next to the University of Chicago, where I spent a year as a cinder in the educational eye of Prexy Hutchins. Inasmuch as I was hacking out fiction and holding down a news feature job on the side, I decided to leave the Midway to Compton and other show-offs.

Been pounding out stories with wild enthusiasm ever since in order to assure an exceptionally lovely little red-headed colleen that we will live happily ever after. As a sort of sideline I accumulate utterly staggering debts and play a little game I have called, "Dodge The Creditor."

I detest people who, when informed that I write ask me: "What do you do for a *living?*"

If I were asked (and it isn't likely I will be) to name America's most promising young fiction writer, I'd pick William P. McGivern.

The fact that I owe him ten bucks has nothing to do with the choice. I owe Jack West money, but I'm not saying a word.

I have a child-like faith in the Constitution, the Bill Of Rights, and in my ability to say, "slipshod" after seven drinks.

David Wright O'Brien, Chicago, Illinois.

(Editor's note: Mr. O'Brien has adopted a rather facetious tone in this bit about himself, but in reality, he is a very serious-minded young man, and his work to date in science fiction and in general adventure fiction has made good the prediction we made a year ago when we said he was a lad to watch.

The latest news we have on his progress, is of the inclusion of one of his stories in an anthology of imaginative fiction. The story which has been mentioned is "Truth Is A Plague," which was his first story for AMAZING STORIES.

Recently, his "Suicide Squadrons Of Space" received first place in reader reaction for August. We have on hand three more yarns by O'Brien, excluding the story presented in this issue. Coming soon is a time-travel story with a new twist.

Mr. O'Brien is the nephew of the late Farnsworth Wright, famous weird story editor.)

QUIZ ANSWERS

(Quiz on page 136)

True and False

1. True. 2. False. You'd be terribly overexposed. 3. True. 4. False. Gamma has. 5. False. That is viscosity. 6. True. 7. False. 8. True. 9. False. A northern grouse. 10. True.

Know Your Planets

Sky; Sir William Herschel; comet; "George's Star"; seventh; 1782; 32,000; 10; 84; 68,000; 4; Ariel, Umbriel, Titania and Oberon; English; perpendicular; retrograde.

Star-Gazing

9, 10, 7, 12, 2, 4, 1, 5, 11, 6, 3, 8.

All Mixed Up

1. Muds, slimes. 2. Smoke. 3. Fog or mist. 4. Foam. 5. Solid foam.

CORRESPONDENCE CORNER

Jim Laichos, Jr., 6021 Vernon Ave., Chicago., Ill., desires correspondents of either sex, ages 16 to 18, and will write concerning everything . . . Alfred Edward Maxwell, 545 E. Madison St., Opelousas, La., would like to hear from fantasy fans, and those interested in amateur science fiction writing and forming a scientifiction club . . . John Cunningham 2050 Gilbert St., Beaumont, Texas, would like pen pals of either sex around 17 to 19 years of age . . . Philip C. Bolander, 1401

AIR POWER will dominate the Pacific . . .

by General William Mitchell

★ ★ ★

Over a decade ago America's prophet of military aviation warned that our air power was the deciding factor in our defense o the Pacific, and without it, any attempt to hold our possessions or protect our country against an enemy would be fruitless. Reproduced in the October FLYING And POPULAR AVIATION is an intensely interesting article which first appeared in POPULAR AVIATION in 1929. Read how, eleven years later, General Mitchell's statements remain thought provoking and startling. Read all about our air power in the Pacific and what it means to us as a nation. By all means, don't miss this truly outstanding feature in the

OCTOBER ISSUE

FLYING AND POPULAR AVIATION

NOW ON SALE AT ALL NEWSSTANDS

Bay St., Alameda, Calif., wishes to hear from persons interested in science and joining a science organization . . . James Kritz, 717 Nichols St., Fulton, Mo., would like to hear from those interested in model building and aviation; either sex, all ages . . . Jean Hughes, 316 Washington Ave., Newport, Ky., would like pen pals from U. S. A. or foreign countries, either sex, any age, interested in collecting and trading match covers . . . Larry Jelf, 16, 680 Dickerson, Apt. 1, Detroit, Mich., desires correspondents from 14 to 18 years of age, in this country, interested in automotive body designing, reading and writing science fiction, saving astronomy articles and collecting stamps . . . Thomas Hoguet, 3671 Broadway, N. Y. C., has over 100 science fiction magazines for sale; send 3c stamp for price list . . . Darrel LeFever, Alamo, Texas, Box 888, has for disposal various magazines including 201 science fiction issues; also wishes to communicate with fans and collectors anywhere and will reply to all letters . . . Blaine R. Dunmire, 414 Washington Ave., Charleroi, Pa., would like to hear from anyone interested in discussing science fiction writing and illustrating, and will promptly answer all letters; also is interested in hearing from those who have miscellaneous magazines for sale . . . Stanley Goodman, 370 Second Ave., Long Branch, N. J., has for sale a variety of science fiction magazines in excellent condition, 10c each . . . Albert Mendelbaum, 1243 Junida St., N. S., Pittsburgh, Pa., has for sale in book form various Edgar Rice Burroughs stories, and will sell to highest bidders . . . Robert Stoker, Lagro, Ind., will buy or trade precancels for various magazines up to 1937 . . . Ray J. Sienkiewicz, 312 E. Elm St., Scranton, Pa., wants to communicate with readers of AMAZING STORIES and FANTASTIC ADVENTURES in the Scranton vicinity who are interested in forming a scientifiction club; write, telephone, 2-2554, or call in person . . . Professor Chester Hoey, 301 6th Ave., Brooklyn, N. Y., will answer all problems free of charge . . . Richard Post, 4217 Homerlee Ave., East Chicago, Ind., would like pen pals around 14, especially interested in chemistry; also has science fiction magazines to exchange . . . Louie A. Mohrman, Wellington, Ohio, would like to hear from song writers, poets, and contest fans, and will answer all letters; also, exchange view cards, books and magazines and will send a surprise package to the first correspondent from each state . . . Wm. Byron Myers, 556 Bradley St., Columbus, Ohio, 18 yrs., would like pen pals especially interested in exchanging stamps, radio and stamp collecting . . . Bob McDonald, Box 903, Litchfield, Minn., will send price lists to anyone desirous of back issues of science fiction magazines . . . Hugh F. Randolph, 205 Lawrence Ave., North Plainfield, N. J., has an almost complete collection of every science fiction magazine issued in 14 years and would prefer disposing of them to someone who can call for them . . . William F. Crisp, 124 S. Flower St., Los Angeles, Calif., wishes to hear from persons interested in discussing solutions regarding opening of the human mind to the gaze of the public in all its phases, functions and vibratory pulsations . . . Enos E. Jackson, Calle 12, 92 LaTorre, Santiago De Cuba, will write long interesting letters about Cuba, send postal cards; etc., to all who write and are interested in stamp collecting . . . Max Belz, Waldoboro, Me., has back numbers of AMAZING STORIES from 1928 to date for sale, and will play chess via mail with any player in the U. S. A. or Canada; stakes or not, as desired . . . Chester Kensiski, Box 182, Terryville, Conn., would like to correspond with someone interested in Astronomy, between the ages of 13 and 18 . . . Clement Wendell, Box 427, Willcox, Ariz., would like to buy back issues of AMAZING STORIES. . . .

Treasure Trove in Time

(Concluded from page 133)

And it *was* the financial page at some time in the future, naturally.

Nevertheless, Malcolm Mace gasped. Gasped and stepped back from the print, throwing his hands to his face with a hoarse, incredulous sob. For the date on the page shown in the picture was the *same date** as that on the page he had photographed.

Quite the same, with the exception of the fact that the page in the photograph was a trifle soiled, slightly yellowed, and wrapped around some garbage reposing on the top of an overfilled trash can in an alley!

* Malcolm Mace, obviously, has forgotten one little point—that the picture taken by the plate depicts only a present-day object as it will appear in future time. The plate does not forecast the future; it merely shows what the future will be in relation to a specific object.

Had Mace understood this point, he would have gone downtown to the big display window in the city's leading newspaper, where the financial page was tacked on to a bulletin board each afternoon after the market's close.

The photograph of this page would obviously turn out to be an entirely different set of quotations, with a different date. Because the photographic plate would depict that particular bulletin board as it would be in future time. The board would be exactly the same, but the page on it would be in the future, being changed each day.

Hence Malcolm Mace lost a fortune because he was too greedy to comprehend the larger aspects of his great opportunity.—Ed.

THE VISIBLE INVISIBLE MAN

OSCAR DOOLITTLE stood up and crossed over to a strange, complicated contraption . . . a box-like affair, sprinkled with rheostats, dials and wires. "About ready," he muttered. "No time to lose!"

Turning from the odd equipment, Oscar emptied fifty pounds of vanishing cream into the glass vial! Then with trembling fingers he picked up a bottle filled with an oily, black fluid . . . his own secret formula!

With a throbbing pulse that sent the blood racing through his veins, Oscar closed his eyes and poured his sacred mixture into the bubbling cauldron!

The results were a thousand times more surprising than Oscar, in his nimblest flight of imagination, could have conceived!

The results marked the beginning of twelve of the most fantastic, most bewildering hours ever lived through or endured by man . . . twelve hours in which Oscar Doolittle was called a spineless, weak-kneed jellyfish by his shapely, blonde fiancee; accused by his fellow employees of being a timid, helpless doormat that other men wipe their feet on; charged by his boss with stealing a $25,000 negotiable bond; and arrested for grand larceny and embezzlement!!! Top this off with the fact that Oscar became invisible thirteen times, brought frenzied moments of terrifying hell to the entire population . . . and you have before your very eyes the acme in entertainment!

By all means, don't fail to read *The Visible Invisible Man* by William P. McGivern in the big, thrill-packed

DECEMBER ISSUE

DON'T MISS THESE OTHER GREAT STORIES NEXT MONTH!

★ **ADAM LINK FIGHTS A WAR—by Eando Binder.** Once more the metal man returns, in a significant and thrilling story of war on our own Mexican border. The fate of America depends on Adam Link and his robot army.

★ **WEST POINT, 3000 A.D.—by Manly Wade Wellman.** The concluding installment of this sensational new story of the West Point of the thirtieth century. All hell breaks over a giant future city as Martians utilize their treacherously gained knowledge to foster revolt.

★ **CONTEST STORY**—A brand new contest story, filled with—well, that'd be telling. But anyway, you'll enjoy this contest because it's so easy, and you'll have a grand chance to win one of those cash prizes.

AMAZING STORIES

On Sale At All Newsstands October 10th!

QUESTIONS and ANSWERS

This department will be conducted each month as a source of information for our readers. Address your letters to Question and Answer Department, AMAZING STORIES, 608 S. Dearborn St., Chicago, Ill.

Q. Has radium ever been analyzed? If so, what is it composed of? And where can I obtain some radioactive substance?—Lawton Disoso, 1109 Decatur Street, New Orleans, La.

A. Radium is extracted from pitchblende. Uranium, with a great deal of barium, is gotten from pitchblende, and when the barium in turn is removed, we find it still radioactive. Thus, there must be another element in the barium. Madame Curie isolated it and found radium. She has placed it among the metals of the alkaline earths. It has an atomic weight of 226 and is therefore a member of the periodic table, and a true element. It has no other components, and cannot be said to be "composed" of anything. Radium is tremendously expensive, and even if a layman could afford it, he could not buy it because of the extreme danger of handling. Radium exposure results in horrible burns and finally in death. Therefore, you will be unable to secure radium, and any radioactive substance is purely a laboratory and scientific substance handled with extreme care.

* * *

Q. What action takes place in the body when a person has "radium poisoning"? Is uranium dangerous to handle? I mean by this, is uranium capable of burning flesh or of destroying a body? —Ben Ward, Crystal City, Texas.

A. Radium poisoning results in ulcerous sores, and breakdown of tissue. It is incurable. Uranium, being radioactive, is dangerous to handle. However, it will not destroy a body, if you mean completely burn it away. Even if it did, it would be a tremendously expensive means of cremation. It certainly can and will cause flesh burns, however.

* * *

Q. What does the spectroscope show for Mars' atmosphere, and how many light years away is Sirius?—W. Lewis, Newcastle, Maine.

A. Apparently, Mars has an atmosphere of approximately sixty miles thickness. It shows an oxygen content, and a heavy hydrogen content. Nitrogen is rare. Sirius is 8.3 light years away.

* * *

Q. Is it true that we would have to travel four light years to arrive at the nearest star, which is Alpha?—A. A. Betts, 18 Wascana Ave., Toronto, Ontario, Canada.

A. Yes, four light years is correct. But the nearest star is A. Centauri, to be specific.

Q. What is the most powerful explosive known?—Milton Parry, 2338 Dwight Way, Berkeley, Calif.

A. The most powerful explosive is generally accepted to be T. N. T. (trinitrotoluene), but Professor Barlow recently demonstrated a more powerful explosive, and definite knowledge of exactly what specific explosive is the most powerful is not known. A mixture of oxygen and methane gas is said to be capable of terrific detonation.

* * *

Q. There is a little chemical information I have been trying to obtain for some time. About two years ago I read a story that had a chemical composition in the plot. The author said that this material was known as "The Mad Dog Of Chemistry" and that it had the property of burning with intense heat on being exposed to air. I should be very much indebted to you if you could supply me with the name or formula of such a chemical. —W. Garlick, 59 Shasta Place, Bend, Oregon.

A. Both sodium and magnesium have the capability of burning when exposed to air. Sodium, exposed to oxygen (one of the components of air) burns brilliantly. Magnesium burns in air, with a bright light, and is the substance used in making photographic flash powders and bulbs. We don't recognize the term "Mad Dog Of Chemistry," in connection with the story you read. Perhaps our readers can recall the story in question, and give us the definite information you desire. We will welcome letters and publish the information if submitted.

* * *

Q. Just how is "ground" glass produced?—Edward H. Marquesan, Decatur Falls, Iowa.

A. Ground glass is not produced by "grinding" it as you might believe, but by sand blasting. The same process is used in making "engraved" glass, except that a stencil is used to provide the pattern.

* * *

Q. Is it true that the tides are not as high in mid-ocean as they are near the shore?—Arnold Walthen, Colorado Springs, Colo.

A. In mid-ocean, the difference between high and low water is usually between two and three feet, as observed on isolated islands in the deep water. On the continental shores the height is ordinarily much greater. As soon as the tide wave "touches bottom," so to speak, the velocity is diminished, the tide crests are crowded more closely together, and the height of the tide is very much increased, as land is reached.